



Class _____

Book

COPYRIGHT DEPOSIT





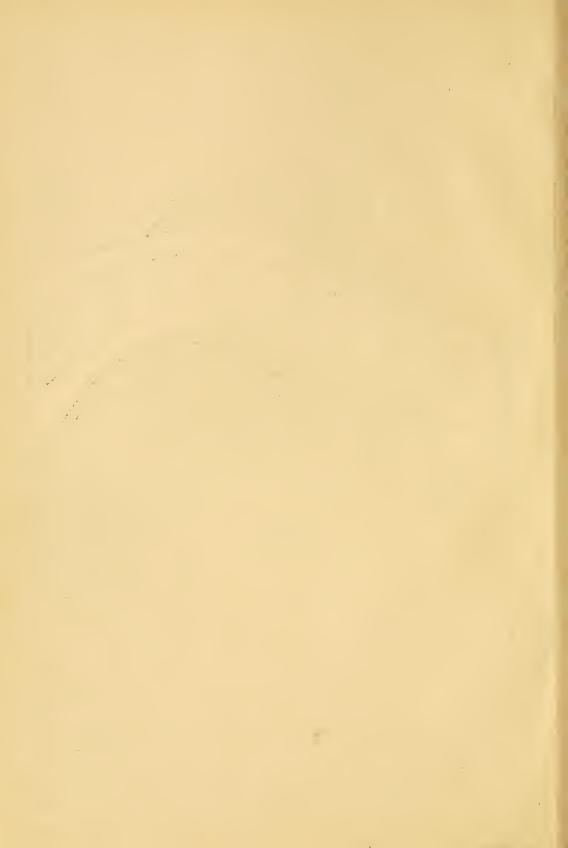
















BRITISH CELEBRITIES OF THE CENTURY

GRANDEST CENTURY

IN

THE WORLD'S HISTORY

CONTAINING A

FULL AND GRAPHIC ACCOUNT OF THE MARVELOUS ACHIEVE-MENTS OF ONE HUNDRED YEARS

INCLUDING

GREAT BATTLES AND CONQUESTS; THE RISE AND FALL OF NATIONS; WONDERFUL GROWTH AND PROGRESS OF THE UNITED STATES; FAMOUS EXPLORATIONS, DISCOVERIES, Etc., Etc.

SUBLIME TRIUMPHS OF ELECTRICITY

REMARKABLE INVENTIONS; PROGRESS OF SCIENCE, LITERATURE, ART

AND AGRICULTURE; CELEBRATED MEN AND WOMEN

OF THE CENTURY, Etc., Etc.

By Henry Davenport Northrop

Author of "Gem Cyclopedia of Universal Knowledge," "Queen of Republics," Etc., Etc.

Profusely Embellished with a large number of Phototype and Wood Engravings

NATIONAL PUBLISHING CO. PHILADELPHIA, PA.

THE LIBRARY OF CONGRESS,
Two Copies Received
APR 8 1903
Copyright Entry
The 8-1900
Class a 200, No.

ENTERED ACCORDING TO ACT OF CONGRESS, IN THE YEAR 1900, BY J. R. JONES
IN THE OFFICE OF THE LIBRARIAN OF CONGRESS, AT WASHINGTON, D. C.

> D :58 .N86



S volume contains a full and glowing account of the world's wonderall progress in the Nineteenth Century. It vividly depicts the grand
climax of all the centuries, and describes the great events that have
made the history of mankind sublime and glorious. It is a marvellous record
of Bulliant Achievements, such as the Triumphs of Electricity; Great Explorations and Discoveries; the Application of Steam to Navigation; the growth of
the World's Navies, and the amazing advances in Education, Religion, Literature, Art and Science.

Such a Century Plant, unfolding its wonderful blossoms, has not been seen before in the history of man. The last Hundred Years have witnessed the Growth of the United States from five and a half million people to more than seventy million; amazing strides in Agriculture; the development of Immense Natural Resources, and the victories of Invention, Heroism and Statesmanship.

The swift march of events in other parts of the globe includes the downfall of Napoleon I. and Napoleon III.; the rapid changing of the map of Europe, the conflict between Russia and the Allied Powers of England and France; the expulsion of Spain from the Western Continent; and the bloody war in South Africa.

The last third of the Century witnessed a spirited struggle among the European Powers for supremacy in Africa, which a few years before was an unknown Continent. This masterly work contains a vivid account of the desperate conflict between the British and the Boers, states the Causes of the War, and furnishes graphic descriptions of Battles, Sieges, and Heroic Achievements, which tested the courage, endurance and patriotism of the sturdy combatants. It is a peerless volume, unrolling a grand panorama of historic events and the world's progress in every field of human activity.

Part I.—Great Events of American History in the Nineteenth Century. From the purchase of Louisiana in 1803 down to the War with Spain and the Filipino Insurgents, all the events are depicted that make the history of that

iv PREFACE.

Country in the last hundred years read like a miracle. No nation has made greater progress in all that pertains to the highest civilization than our own, and the record of it is in this attractive volume.

Part II.—European and other Countries in the Nineteenth Century. The downfall of the French Empire, the growth of Great Britain, the seething forces breaking out into tragedies of war and the overthrow of Thrones and Empires, are described by a masterly hand. This part of the work affords a comprehensive survey of the nations of the earth.

Part III.—Famous Explorations and Discoveries of the Nineteenth Century. The mysteries of the Dark Continent have been brought to light and the frigid Polar World has been made to reveal its icy secrets. The reader traverses the jungles and plains of Africa and the frozen realms of the North with daring explorers, whose adventures, exploits and achievements have given them a world-wide fame.

Part IV.—Great Wars and Battles of the Nineteenth Century. From the plains of Austerlitz and Waterloo down to the famous victories of Manila, Santiago and the hard-fought Battles in South Africa, the reader views the bloody drama of war and hears the booming of guns that pronounce the fall of Emperors and Nations. The century closes amid the smoke and din of conflict; we may well indulge the hope that all this is the terrible birthpang of better things.

Part V.—Marvellous Inventions and Scientific Discoveries of the Nineteenth Century. This is a whole world by itself, opening to the reader's wondering view the marvels of Mechanical Invention, man's triumphs over the forces of nature, making them his willing servants, and the myriad discoveries that are almost too wonderful to be believed.

Part VI.—Religion, Literature and Art in the Nineteenth Century. These subjects are fully treated and are of great interest throughout.

Part VII.—Famous Men and Women of the Nineteenth Century. This Part comprises all the great celebrities whose achievements give lustre to recent decades, and whose names stand high on the scroll of immortal fame.



CONTENTS.

PART I.

GREAT EVENTS OF AMERICAN HISTORY IN THE NINETEENTH CENTURY.

CHAPTER I.

THE LOUISIANA PURCHASE.

Purchase of Louisiana—Napoleon Threatening Great Britain—Piratical States of Barbary—Jefferson Re-elected—Treason of Aaron Burr—Blow to American Commerce—Trouble with Great Britain—Arbitrary Decree of Napoleon—Importation of Slaves Forbidden—Robert Fulton's First Steamboat—The "Clermont". Makes a Voyage from New York to Albany—Sailing Vessels Superceded by Steam—Fulton the First Great Inventor of the Century.

CHAPTER II.

OUR SECOND WAR WITH GREAT BRITAIN.

CHAPTER III.

ORIGIN AND GROWTH OF THE MORMONS.

Joseph Smith, Founder of the Sect—The Book of Mormon—Prominent Mormons Swear Falsely—The Book a Historical Romance—Smith Tarred and Feathered—Removal to Nauvoo—Smith Shot Dead by a Mob—Mormon Temple Destroyed by Fire—Mormons Move Again and Found Salt Lake City—Outrages by Armed Mormons—Mountain Meadows Massacre—Federal Troops Sent to Utah—John D. Lee Convicted and Executed for the Mountain Valley Massacre—Death of Brigham Young—Polygamy Suppressed by the Government.

CHAPTER IV.

WAR BETWEEN THE UNITED STATES AND MEXICO.

People from Connecticut Settle in Texas—Moses Austin Obtains a Grant from the Spanish Government—Large Immigration Pours into Texas—Austin Arrested and Imprisoned—Santa Anna in Power—His Troops Driven Out of Texas—Davy Crockett—Mexican Army Routed—Texas a Republic in 1837—Movement in Congress for the Annexation of Texas—Proposition Resisted by Mexico—Bloody Battles Between the Mexican and American Armies—Achievements of General Taylor—General Scott's Expedition—Our Arms Everywhere Victorious—Return of Peace on the 4th of July, 1848.....

PAGE

17

CHAPTER V.

THE GREAT CIVIL WAR.

AGITATION UPON THE QUESTION OF SLAVERY—THE MISSOURI COMPROMISE—STRUGGLE IN KANSAS IN 1854—DEMOCRATIC PARTY DIVIDED—ELECTION OF ABRAHAM LINCOLN TO THE PRESIDENCY—THE SOUTH ASSERTS STATE SOVEREIGNTY—APPALLING STATE OF AFFAIRS—MANY SOUTHERN STATES SECEDE FROM THE UNION—OUTBREAK OF THE WAR—MAJOR ANDERSON ATTACKED AT FORT SUMTER—CONFEDERATE PLAN TO DESTROY COMMERCE—FIRST GREAT BATTLE—SLAVES DECLARED "CONTRABAND OF WAR"—FEDERAL EXPEDITIONS TO RECAPTURE SOUTHERN HARBORS—CONFEDERATES SEEK RECOGNITION ABROAD—WAR OF VAST MAGNITUDE—GENERAL GRANT IN THE WEST—TERRIBLE BATTLES AND MANY FEDERAL DEFEATS—FIGHT BETWEEN THE MERRIMAC AND THE CUMBERLAND—"STONEWALL JACKSON"—GENERAL MCCLELLAN'S ADVANCE—THE CAPITAL THREATENED

CHAPTER VI.

END OF THE GREAT CIVIL WAR.

HARD FIGHTING IN TENNESSEE—CAPTURE OF FORT PULASKI—SLAVERY QUESTION A1
THE FRONT—LINCOLN THREATENS TO FREE THE SLAVES—BATTLES OF CHANCELLORSVILLE—GRANT'S VICTORY AT VICKSBURG—FEDERALS VICTORIOUS IN GREAT BATTLE AT GETTYSBURG—RIOTS IN NEW YORK—GENERALS THOMAS AND BRAGG—GENERAL LONGSTREET WOUNDED—GRANT MADE COMMANDER-IN-CHIEF—TERRIBLE FIGHTING IN THE WILDERNESS—GENERAL SHERMAN'S GREAT MARCH TO THE SEA—LINCOLN
ELECTED TO A SECOND TERM—LEE'S SITUATION DESPERATE—END OF THE GREAT
STRUGGLE—ASSASSINATION OF PRESIDENT LINCOLN—DEATH OF THE ASSASSINS.

CHAPTER VII.

FROM THE RESTORATION OF THE UNION TO OUR WAR WITH SPAIN.

OPENING OF THE UNION PACIFIC RAILWAY—OUR GOVERNMENT INSISTS UPON GREAT BRITAIN ALLOWING DAMAGES FOR CAPTURES BY CONFEDERATE CRUISERS—COURT OF ARBITRATION—GREAT FIRE IN CHICAGO—LOSS AMOUNTS TO \$196,000,000—DISCONTENT IN CUBA—SEIZURE OF THE VIRGINIUS AND EXECUTION OF HER CREW—DEMANDS OF OUR GOVERNMENT UPON SPAIN—PEACE COMMISSIONERS MURDERED BY MODOC INDIANS—ASSASSINS FOLLOWED AND SHOT OR HANGED—CENTENNIAL EXHIBITION OF 1876—IMPOSING CEREMONIES AT ITS OPENING—GARFIELD INAUGURATED PRESIDENT—PRESIDENT GARFIELD SHOT BY AN ASSASSIN—GENERAL ARTHUR BECOMES PRESIDENT—DISCOVERY OF GOLD IN ALASKA—PROSPERITY IN 1898 AND FOLLOWING YEARS.

CHAPTER VIII.

THE SPANISH-AMERICAN WAR.

CUBA'S STRUGGLE FOR FREEDOM—DESTRUCTION OF THE BATTLESHIP MAINE—MESSAGE TO CONGRESS FROM THE PRESIDENT—OUTBREAK OF WAR WITH SPAIN—ADMIRAL DEWEY'S GREAT VICTORY AT MANILA—YOUNG HEROES OF THE WAR—UNITED STATES ARMY LANDED IN CUBA—EXPLOITS OF THE "ROUGH RIDERS"—BATTLES OF SAN JUAN AND EL CANEY—ADMIRAL CERVERA'S FLEET DESTROYED BY AMERICAN SQUADRON UNDER COMMAND OF COMMODORE SCHLEY—UNITED STATES ARMY LANDED IN PORTO RICO—CAPTURE OF THE CITY OF MANILA—PEACE COMMISSIONERS APPOINTED BY THE UNITED STATES AND SPAIN—NEGOTIATIONS FOR PEACE—PEACE TREATY SIGNED BY THE TWO GOVERNMENTS—BLOODY CONFLICTS WITH THE INSURGENTS IN THE PHILIPPINES—GREAT NAVAL SPECTACLE IN NEW YORK HARBOR—SWORD FOR ADMIRAL DEWBY—MAGNIFICENT RECEPTION TO DEWBY ON HIS RETURN.

113

1.01

PART II.

EUROPEAN AND OTHER COUNTRIES IN THE NINETEENTH CENTURY.

CHAPTER IX.

GREAT EVENTS IN ENGLISH HISTORY.

PAGE

**RENCH DEFEATED IN EGYPT—BRITISH NAVAL VICTORY AT COPENHAGEN—WILLIAM PITT IN POWER, 1804—NAPOLEON DETERMINES TO INVADE ENGLAND—GREAT NAVAL VICTORY OF THE ENGLISH FLEET AT TRAFALGAR—NAPOLEON'S BRILLIANT SUCCESSES—BATTLES OF AUSTERLITZ AND JENA—THE "IRON DUKE"—ALLIANCE AGAINST NAPOLEON—IRELAND INDEPENDENT—GEORGE IV. COMES TO THE THRONE—O'CONNELL IN PARLIAMENT—WILLIAM IV. ON THE THRONE—VICTORIA INAUGURATED QUEEN 111 1838—ANTI-CCRN-LAW LEAGUE—WAR BETWEEN RUSSIA AND ALLIED ARMIES OF ENGLAND AND FRANCE—DESPERATE STRUGGLE IN THE CRIMEA—FRANCHISE EXTENDED IN ENGLAND—PUBLIC SCHOOL SYSTEM—MUTINY IN INDIA—PUNISHMENT OF TRAITORS—STRUGGLE OF THE IRISH FOR HOME RULE—THE QUEEN'S JUBILEE IN 1897

97

CHAPTER X.

FRANCE IN THE NINETEENTH CENTURY.

SPLENDID TRIUMPHS OF NAPOLEON—HIS ARBITRARY POWER—EMPIRE PRACTICALLY INCLUDING HALF OF EUROPE—DEFEAT OF FRENCH NAVY BY LORD NELSON—EMPEROR RETIRES TO ELBA—REAPPEARANCE IN FRANCE AND DEFEAT AT WATERLOO—CHARLES X. ON THE THRONE—TROUBLE IN ALGIERS—TROOPS DRIVEN FROM PARIS—ENGLAND'S BOLD MOVE—DEATH OF HEIR APPARENT IN 1842—THE KING ABDICATES—FRANCE A REPUBLIC—PRESIDENT NAPOLEON III. AFTERWARD BECOMES EMPEROR—POLITICAL AGITATION AND TROUBLES—FRENCH AND ENGLISH ALLIANCE AGAINST RUSSIA—FALL OF SEBASTOPOL—FRANCE SENDS AN EXPEDITION TO MEXICO—MAXIMILIAN CAPTURED AND SHOT—SCHEME TO ANNEX BELGIUM—OUTBREAK OF WAR WITH PRUSSIA—FRENCH ARMIES DEFEATED AND DOWNFALL OF NAPOLEON III.—ESCAPE OF EMPRESS EUGENIE FROM PARIS—END OF THE WAR—FAMOUS DREYFUS TRIAL....

143

CHAPTER XI.

THE NEW GERMAN EMPIRE.

GERMANY AGITATED BY NAPOLEON'S SCHEMES AT THE BEGINNING OF THE CENTURY—GERMAN CONFEDERATION—NEW GOVERNMENT ORGANIZED—INSURRECTION SUPPRESSED—AUSTRIA AND PRUSSIA—WAR WITH AUSTRIA AND GREAT GERMAN VICTORY—THE TREATY OF PRAGUE—NEW TERRITORY INCORPORATED—UNION OF GERMAN STATES—FRANCE PROCLAIMS WAR AGAINST PRUSSIA—BATTLES OF GRAVELOTTE AND SEDAN—EMPIRE OF PRUSSIA UNDER WILLIAM I.—LAWS FOR THE WORKING CLASSES—PRUSSIA AND THE PAPACY—NATIONAL ARMY—DEATH OF EMPEROR WILLIAM I.—DEATH OF EMPEROR FREDERICK—WILLIAM II. COMES TO THE THRONE—PRINCE BISMARCK . .

162

CHAPTER XII.

GREAT EVENTS IN THE HISTORY OF RUSSIA.

EMPEROR PAUL MURDERED IN 1801—RUSSIAN LOSS IN THE BATTLE OF AUSTERLITZ—COA-LITION WITH FRANCE—WAR WITH PERSIA—POWERFUL ALLIANCE—CABINET OFFICER CHARGED WITH TREASON—RUSSIA VICTORIOUS OVER PERSIA—RUSSIA SIGNS THE TREATY OF LONDON IN 1827—POLISH INSURRECTION IN 1831—WAR AGAINST ENG-LAND AND FRANCE IN 1853—BLOODY BATTLES IN THE CRIMEA—EMANCIPATION OF THE SERFS IN 1861—RUSSIA ASSISTS SLAVONIC CHRISTIANS AGAINST THE TURKS—DISMEMBERMENT OF BULGARIA—ATTEMPTS ON THE LIFE OF THE EMPEROR—CZAR ALEXANDER CROWNED IN 1883—EMPEROR OF GERMANY VISITS THE CZAR IN 1888—PEACE CONFERENCE AT THE HAGUE IN 1899 CALLED BY THE CZAR OF RUSSIA...

173

CHAPTER XIII.

MATIONS OF NORTHERN EUROPE-DENMARK, SWEDEN AND NORWAY.

DENMARK'S WISE RULER—ASCENDENCY OF NAPOLEON—DANISH FLEET SURRENDERS TO THE BRITISH—NORWAY CEDED TO SWEDEN—MONARCHY IN DANGER—DANISH POSSESSIONS DEFINED—POPULAR DISCONTENT—CONFLICT WITH PRUSSIA—DANISH VICTORY FOLLOWED BY PEACE WITH PRUSSIA—DEMANDS MADE UPON DENMARK—HEROIC COURAGE OF THE DANES—SWEDEN IN THE NINETEENTH CENTURY—NORWAY ATTACKED BY GUSTAVUS—FINLAND CEDED TO RUSSIA—SWEDEN AND NORWAY UNITED.

181

CHAPTER XIV.

NATIONS OF SOUTHERN EUROPE-ITALY, GREECE, TURKEY AND SPAIN.

REVOLUTION AND CONSPIRACIES IN ITALY—MASSACRE IN MILAN—MAZZINI'S ATTEMPT TO ESTABLISH A REPUBLIC IN ROME—REVOLUTION A FAILURE—GARIBALDI AND HIS VOLUNTEERS—ROME EMANCIPATED BY THE LIBERATOR—UNITED ITALY A GREAT CONTINENTAL POWER—GREECE IN THE NINETEENTH CENTURY—WAR FOR INDEPENDENCE IN 1821—TURKS DEFEATED BY THE GREEKS—CIVIL WAR—TURKISH FLEET ANNIHILATED IN 1827—PRESIDENT ASSASSINATED IN 1831—ITALY UNDER PROTECTION OF THREE GREAT POWERS—WAR BETWEEN GREECE AND TURKEY IN 1897—TURKEY IN THE VINETEENTH CENTURY—CONFLICTS WITH THE GREEKS—CRETE AND SYRIA—TURKEY BANKRUPT—MASSACRE OF CHRISTIANS—DEMANDS OF THE UNITED STATES UPON TURKEY—SPAIN IN THE NINETEENTH CENTURY—REVOLUTION IN 1820—ROYAL MARRIAGES—UPRISING OF THE CARLISTS—SPAIN A REPUBLIC—SPAIN AGAIN A MONARCHY—WAR WITH THE UNITED STATES IN 1898

191

CHAPTER XV. CANADA, MEXICO AND SOUTH AMERICA.

Upper and Lower Canada—Internal Dissension in the Early Part of the Century—Canadian Rebellion—Defective System of Government—Invasion of Canada—By the Fenians—Confederation of 1867—Dominion of Canada—Purchase of Territory—Vast Wealth of Mines in British Columbia and Elsewhere—Mexico in the Nineteenth Century—Popular Discontent—Regency Established in 1822—President Overthrown—Disorder and Violence—Succession of Revolutions—The French in Mexico—Execution of Maximilian—South America in the Nineteenth Century—History of Peru—History of Chili—United States of Colombia—British Guiana—Bolivia and Argentine Republic

214

CHAPTER XVI.

ASIA AND AFRICA IN THE NINETEENTH CENTURY.

HE

YAGE
XXY
DR
—
DN

:н • 24:

265

'1-K-A

)F

X-N R ST

276

E E A

E







PAGE

24"

265

PART III.

FAMOUS EXPLORATIONS AND DISCOVERIES OF THE NINETEENTH CENTURY.

CHAPTER XVII.

VOYAGES IN T	HE POLAR WORLD.
--------------	-----------------

CAPTAIN JOHN ROSS-DOCTOR RAE'S DISCOVERIES-STORY OF SIR JOHN FRANKLIN-EX-
PEDITION SENT FOR HIS RELIEF—DEATH OF FRANKLIN AND HIS PARTY—DISCOVERY
of Northwest Passage—Many Expeditions Sent to the Polar World—Doctor
KANE AND LIEUTENANT DELONG IN THE NORTH—CAPTAIN NARE'S EXPEDITION—
Voyage of Lieutenant Greely—Doctor Nanson in Greenland—Expedition
BY LIEUTENANT PEARY OF THE UNITED STATES NAVY—FUTILE ATTEMPT TO REACH
THE POLE IN A BALLOON BY ANDREE

CHAPTER XVIII.

LIVINGSTONE AND STANLEY IN CENTRAL AFRICA.

Brave Old Missionary—His Start for Zanzibar—Plunges into Wild and Inhospi-
table Regions—Picturesque African Scenery—An Unbounded Forest—Remark
able Travels by Stanley—Adventure with an Elephant—In Danger of A
Massacre—A Frightened Negro—Great Freshet in the River—Arrival at
RAGAMOVO

CHAPTER XIX.

STANLEY'S GREAT JOURNEYS ACROSS AFRICA.

Ho	w Stanley Found LivingstoneDetermines to Explore Africa—First Stage of
	HIS JOURNEY-MANY ADVENTURES-HOSTILE NATIVES-INVITATION FROM A KING-
	FANTASTIC PARADE-BIG WAR-BOAT-FAMOUS TIPO-TIPO-THE TERRIBLE DWARFS-
	Passing the Rapids-Mutiny in Camp-Deserted by the Guides-Stanley's Ex-
	PEDITION IN TERRIBLE STRAITS—HIS SUCCESSFUL JOURNEY ACROSS AFRICA—RETURN
	TO ENGLAND AND THE UNITED STATES—PUBLIC HONORS FOR THE GREAT EXPLORER
	-FETED IN ENGLAND AND AMERICA-REMARKABLE SUCCESS OF ONE OF THE GREATEST
	EXPEDITIONS ON RECORD

CHAPTER XX.

TRAVELS AND ADVENTURES OF VAMBERY IN CENTRAL ASIA.

THE MODERN CAPITAL OF PERSIA—SHRINES OF MOSLEM SAINTS—GROVES OF ORANGE
AND LEMON TREES—VERDANT PLAINS ON EVERY SIDE—CARAVAN IN GREAT PERIL—
THE ROUTE LOST—WARM RECEPTION FOR VAMBERY—TRAVELLING IN A FERTILE
COUNTRYSCARCITY OF WATERCITY OF BOKHARA-A STRANGE TRAVELLERCAR
AVAN SHUT OUT OF THE CITY—DAZZLING EASTERN SPLENDOR—THE EMIRS PARADE
"Mother of Cities"-The Traveller's Means Exhausted-Welcome from A
Prince

PART IV.

GREAT WARS AND BATTLES OF THE NINETEENTH CENTURY.

CHAPTER XXI.

DOWNFALL OF NAPOLEON AT WATERLOO.

EXTRAORDINARY MILITARY GENIUS—IMMENSE ARRAY OF FORCES FOR A GREAT BATTLE ~CHAIN OF FORTRESSES ON THE BELGIAN FRONTIER—WELLINGTON IN COMMAND OF

THE ALLIED ARMY—BLUCHER WITH 80,000 MEN—BLUCHER ATTACKED AND DEFEATED	YA.Gu
BY NAPOLEON—THE EMPEROR DECIDES TO GIVE BATTLE—CHOOSING POSITION FOR THE GREAT STRUGGLE—DISPOSITION OF TROOPS ON EACH SIDE—ARMIES FACE TO FACE—TERRIFIC CANNONADE—DISGRACEFUL PANIC—HEROIC DEFENSE—CHARGE ON BRITISH CENTRE—THE "IRON DUKE" AT THE FRONT—NEY'S SUPERB BRAVERY—VETERANS HURLED BACK—MAGNIFICENT CHARGE OF THE OLD GUARD—"NINE DEADLY HOURS"—WATERLOO COMPARED WITH GETTYSBURG	310
CHAPTER XXII.	
DECISIVE BATTLES OF AUSTERLITZ AND JENA.	
STRIKING FIGURE OF NAPOLEON—FRENCH HOST CROSSES THE RHINE—GUARD DRIVEN BACK—DARING STRATEGY—AN IMPREGNABLE FORTRESS—SETTING A TRAP—MATCHLESS MARSHAL MURAT—NAPOLEON'S STRATEGY—DASHING CAVALRY CHARGE—RUSSIANS HURLED BACK—A BLOODY STRUGGLE—VALOR WAS IN VAIN—FIERCE BATTLE OF JENA—NAPOLEON IN THE RANKS—TERRIFIC COMBAT—TWO GALLANT CHARGES—SCENE OF CARNAGE—THOUSANDS OF BLOODY SWORDS—NAPOLEON AT JENA—THE EMPEROR CARING FOR THE WOUNDED ON THE FIELD	328
CHAPTER XXIII.	
BRILLIANT VICTORIES OF COMMODORE PERRY AND GENERAL JACKSO	N
Famous Battle of Lake Erie—Strong Array of English Ships—Brisk Firing—Hand to Hand Combat—Rousing Cheers—Perry Leaving His Ship and Crossing to Another in an Open Boat—British Vessels Trying to Escape—Heavy Casualties—Glory for the American Navy—Battle of New Orleans—Formidable British Fleet—American Forces Commanded by "Old Hickory"—Brilliant Fighting on Both Sides—British Valor and Fortitude—British Advance Slow and Wearisome—Americans Behind Cotton Bales—British Infantry Hurled Back—Fatal Errors—A Withering Fire—Desperate Assault by the British—Death of the British Commander and Victory for the Americans—Battle Fought Before News of Peace Reached the Combatants—Jackson the	
Hero of the Hour	352
CHAPTER XXIV.	
GREAT BATTLE OF GETTYSBURG.	
THREE DAYS FIGHT THAT TURNED THE TIDE OF WAR—GENERAL LEE'S SUCCESSES IN THE SOUTH—BOLD ATTEMPT TO INVADE THE NORTH—TWO GALLANT COMMANDERS—GENERAL MEADE'S PLAN OF BATTLE—HOW THE FIGHT BEGAN—DEATH OF THE GALLANT REVNOLDS—THUNDER OF ARTILLERY—MAD RUSH OF FEDERALS—HEAVY CAVALRY BATTLE—LEE'S HOPES FATALLY SHATTERED—BRILLIANT REPULSE OF PICKETT'S BRIGADE—CRISIS BATTLE OF THE GREAT CIVIL WAR—LEE AND THE CONFEDERATES IN RETREAT—UNION SUCCESSES ALL ALONG THE LINE	378
CHAPTER XXV.	
BATTLE OF INKERMAN AND CAPTURE OF THE MALAKOFF.	
RRITISH PLUCK AND COURAGE—A SLOW SIEGE—GREAT RUSSIAN HOST—DARING BRAVERY OF THE FRENCH ARMY—RUSSIAN PRINCE ON THE FIELD OF CONFLICT—RUSSIAN COLUMN SHATTERED—RESERVES BROUGHT INTO ACTION—FIERCE FIGHTING ON BOTH SIDES—CRITICAL MOMENT OF THE BATTLE—INVINCIBLE STRENGTH OF THE ALLIED FORCES—HEAVY RUSSIAN LOSSES—AWAITING THE FINAL ATTACK—OUTPOST TAKEN AND RETAKEN—FALL OF THE CITADEL—ONE OF THE LONGEST SIEGES IN HISTORY ENDED—RESULTS OF THE LONG-CONTINUED STRUGGLE	390
Author Webberg of the bould contitueed different to the transfer of the	000

CHAPTER XXVI.

OVERTHROW OF THE FRENCH EMPIRE AT SEDAN.

40%

CHAPTER XXVII.

AMERICAN VICTORIES IN THE WAR WITH SPAIN.

426

CHAPTER XXVIII.

WAR BETWEEN THE BRITISH AND THE BOERS.

DIFFICULTIES OF LONG STANDING BETWEEN ENGLAND AND THE SOUTH AFRICAN REPUBLIC—WAR THREATENED—ULTIMATUM OF THE BOERS TO GREAT BRITAIN—OUTBREAK OF HOSTILITIES—CAPTURE OF 800 BRITISH AND II GUNS—REPULSE OF GENERAL BULLER AT COLENSO—OPERATIONS OF LORD METHUEN ON THE WESTERN BORDER—BATTLE OF MODDER RIVER—LORD ROBERTS IN COMMAND—GENERAL CRONJE'S FLIGHT INTO THE ORANGE FREE STATE—BATTLES IN NORTHERN NATAL—LONG SIEGE OF LADYSMITH—BRITISH SUFFER LOSSES AT MANY POINTS—DEATH OF A BRITISH GENERAL—GENERAL WHITE, DEFENDER OF LADYSMITH—GENERAL FRENCH, COMMANDER OF BRITISH CAVALRY—CAPTURE OF GENERAL CRONJE AND HIS FORCE—BRITISH ARMY AT BLOEMFONTEIN—A COSTLY STRUGGLE.

43**5**

PART V.

MARVELLOUS INVENTIONS AND SCIENTIFIC DISCOVERIES IN THE NINETEENTH CENTURY.

CHAPTER XXIX.

TRIUMPHS OF ELECTRICITY.

PROFESSOR MORSE AND THE ELECTRIC TELEGRAPH—DISCOURAGEMENTS OF THE INVENTOR

—MORSE'S MACHINE AND ALPHABET—FIRST MESSAGE OVER THE WIRES—SUBMARINE
CABLES—LAVING THE FIRST ATLANTIC CABLE—NO SUCH WORD AS "FAIL"—THE
BELL TELEPHONE—THE PHONOGRAPH—WONDERFUL ACHIEVEMENTS OF EDISON—EDISON'S KINETOSCOPE—ELECTRIC LIGHT—DISTRIBUTION OF CURRENT—RIFLES FIRED
BY ELECTRICITY—WIRELESS TELEGRAPHY—INVENTION OF MARCONI—HOW THE MESSAGES ARE SENT—HARD PROBLEMS SOLVED—AUTOMOBILES AND AUTOMATIC VEHICLES

—MOTOR ON WHEELS—KEEPING UP HEAT—WONDERS OF THE ELECTRICAL WORLD—
TELEGRAPHING 100,000 WORDS AN HOUR—PLANTS GROWN BY ELECTRICITY • • • •

CHAPTER XXX.	
STEAM NAVIGATION AND GROWTH OF THE AMERICAN NAVY.	
EARLY ATTEMPTS TO INVENT A STEAMBOAT—ADVENT OF ROBERT FULTON—DIFFICULTIES HE ENCOUNTERED—RIDICULED BY THE INCREDULOUS—FAILURE OF HIS FIRST AT- TEMPT—PEOPLE ASSEMBLED ON THE BANKS OF THE HUDSON TO SEE THE BOAT START—SURPRISE AT FULTON'S SUCCESS—LOUD CHEERS BY THE CROWD—FROM NEW YORK TO ALBANY AND BACK—PEOPLE ALONG THE RIVER TERRIFIED AT THE STRANGE VESSEL—FLOATING BATTERIES—OCEAN STEAMERS AND BATTLESHIPS— LARGEST STEAMSHIP—OUR EARLY NAVY—GRAND "OLD IRONSIDES"—ADMIRAL DEWEY'S FLAGSHIP—FAMOUS OREGON—THE SWIFT COLUMBIA	PAG:
CHAPTER XXXI.	
ELIAS HOWE'S SEWING MACHINE.	
A Poor Inventor—How He Came to Invent the Sewing Machine—Hopeless Poverty for Many Years—Curious Needle and Shuttle—How Obstacles were Overcome—Public has no Faith in His Invention—Repulsed by Many to Whom He Applied for Assistance—Finds a Friend at Last—Tries His Fortune in England—Affliction in His Family—Death of His Courageous Wife—Manufactures Machines to Order—Success of the Invention Which Brings a Fortune—Gold Medal from the Paris Exposition in 1867 and the Cross of the Legion of Honor—Colonel in the Union Army During the Civil War—Lavish with Money for the Benefit of His Soldiers—Howe's Rank Among the most Distinguished Inventors	48
CHAPTER XXXII.	
HOE'S LIGHTNING PRINTING PRESS.	
Invention that Revolutionized the World of Letters—History of the Hoe Family—Arrival of one in New York from England—Energetic Young Man —First Printing That was Done by Steam—Urgent Demand for Rapid Newspaper Presses—Problem Long Baffled Solution—Solved at Length in a Single Night—Immense Fortune for the Inventor—London Times and Other Presses—Successful Rotary Printing	49
CHAPTER XXXIII.	
MISCELLANEOUS DISCOVERIES AND INVENTIONS.	
Discovery of the Famous X-Rays—Wonderful Experiments and Results—Discovery of Liquid Air—Coldest Substance Known—Its Practical Uses—Goodvear's Process for Utilizing India Rubber—Discoveries in the Art of Healing—Germs of Disease—Finsen Light Cure—Pasteur's Discovery—A Remedy for Hydrophobia—Anti-Toxine—Skin and Bone Grafting—Discovery of Anesthetics—Explorations at the Bottom of the Sea—Submarine Boats—Death-Dealing Machines of War—Powerful Explosives and Projectiles—Smokeless Powder—Nitro-Glycerine—Dum-dum Bullet—Marvellous Searchlights—Torpedoes and Submarine Mines—Machine Guns—Invention of the Bicycle—Old Styles Compared with the New—Travelling in the Air—Inventions for Aerial Navigation	49
CHAPTER XXXIV.	

INVENTIONS APPLIED TO RAILWAYS AND CANALS.

SLOWPPROGRESS IN RAILROAD BUILDING-VAST GROWTH IN THE LAST HALF OF THA CENTURY-IMMENSE ENGINES-FASTEST TRAINS IN THE WORLD-ELECTRICITY AS & MOTIVE POWER—TRANS-SIBERIAN AND CHINESE EASTERN RAILWAY—LONGEST ROAD IN THE WORLD—MARVELLOUS BRIDGES—PROJECTED ROAD FROM CAPE TOWN TO CAIRO—CECIL RHODES AND HIS GREAT SCHEME—NINETY MILES AN HOUR—GREAT CANALS OF THE WORLD—THE PANAMA ROUTE—NICARAGUA CANAL—CHICAGO DRAINAGE—OUTLET TO THE MISSISSIPPI—THE KEIL SHIP CANAL—DIMENSIONS AND COST.

515

CHAPTER XXXV.

PROGRESS OF AGRICULTURE DURING THE CENTURY.

GREAT IMPROVEMENT IN THIS DEPARMENT OF LABOR—CHEMISTRY APPLIED TO AGRICULTURE—SIR HUMPHRY DAVY AND HIS DISCOVERIES—LIEBIG AND HIS EXPERIMENTS—CHEMICAL ELEMENTS OF THE SOIL—NOURISHMENT OF THE PLANTS—FARM LITERATURE—NEW METHODS OF TEACHING FARMING—SUCCESS OF EXPERIMENT STATIONS—GROWTH OF AGRICULTURAL SOCIETIES—GOVERNMENTS BECOME INTERESTED—THOROUGH EDUCATION FOR THE FARM—GREAT NUMBER OF FARMERS COMPARED WITH REMAINDER OF POPULATION—OLD FARM IMPLEMENTS COMPARED WITH THE NEW—GREAT IMPROVEMENT IN UTENSILS—AGRICULTURE IN EUROPE—MACHINERY FOR EVERYTHING—VARIETY OF GRASSES—FAMOUS CATTLE AND SHEEP—FARMERS A RULING POWER.

524

CHAPTER XXXVI.

REVIEW OF THE WORLD'S SCIENTIFIC PROGRESS IN THE NINETEENTH CENTURY.

Few Great Inventions Prior to the Nineteenth Century—Catalogue of Inventions During the Last Hurdred Years—Spectrum Analysis—Use of Antiseptics in Surgical Operations—Only Remarkable Invention of the Seventeenth Century that of the Telescope—Barometer and Thermometer—No Invention of the First Rank in the Sixteenth Century—Mariner's Compass—Measuring the Velocity of Light—Nature of Meteors and Comets—Antiquity of Man—Theory of Organic Evolution—Embryology—Astronomy in the Nineteenth Century—Photography as an Aid to the Telescope—Phenomena of our Solar System—The Earth's Satellite—Eclipses of the Sun Remarkable Corona—Discovery of a Vast Number of Asteroids—Amazing Growth of Human Knowledge in Every Direction

535

PART VI.

RELIGION, LITERATURE AND ART IN THE NINETEENTH CENTURY.

CHAPTER XXXVII.

CHRISTIANITY IN THE LAST HUNDRED YEARS.

Wonderful Progress in Industrial Science—French Infidels in the Beginning of the Century—Revival of Spiritual Religion—Great Missionary Zeal—Moravians and Their Remarkable Work—Scotch and English Churches and Missionary Societies—American Board of Commissioners for Foreign Missions—Vast Sums of Money Contributed to the Cause—What is Shown by the Figures?—Necessity for Medical Missions—Missionary Zeal of the Papal Church—Wonderful Advance of Christianity During the Century—Church Statistics—Church Property—Humanity a Brotherhood—The Russian Emperor's Peace Conference at the Hague—Formation of Permanent Board of Arbitration—Stitlement of International Disputes without the Sword.

CHAPTER XXXVIII.

THE	CENTURY'S	PROGRESS	IN	EDUCATION	AND	LITERATURE
	OBMIONIO	I KOGKEDOO	214	DDOOMITTOR	UILD	LITERATURE

PAGE

EDUCATION AS AFFECTING WOMEN—OLD-FASHIONED IDEAS OF WOMAN AND HER SPHERE -Money Value of Women's Labor-Many Avenues of Activity Open to the FEMALE SEX-THE WOMAN OF THE TWENTIETH CENTURY-A FLOOD OF BOOKS-ENORMOUS MASSES OF LITERATURE—SHORT-LIVED WORKS—ADMIRABLE HISTORIES— MANY WRITERS OF GREAT REPUTE—SIR WALTER SCOTT AND THE WAVERLY NOVELS— WHOLESOME HUMOR OF THACKERAY-WONDERFUL CREATIONS OF CHARLES DICKENS -George Eliot and Her Famous Works-Novelists and Essay Writers-IMPORTANT EDUCATIONAL EVENTS IN THE NINETEENTH CENTURY—CHAUTAUOUA SYS-TEM OF EDUCATION—AGRICULTURAL EDUCATION—INSTRUCTION ON THE FARM . . .

CHAPTER XXXIX.

A HUNDRED YEARS OF ART.

CENTRES OF ART IN EUROPE-GREAT FACILITY FOR ART STUDY IN PARIS-VAST IM-PROVEMENT AND GROWTH IN AMERICAN ART—PICTORIAL ART AND ITS RAPID DE-VELOPMENT-IMMENSE NUMBER OF ILLUSTRATED BOOKS AND MAGAZINES-OLD-TIME PICTURES-RIVAL SCHOOLS OF ART IN FRANCE-ENGLAND'S RENOWNED PAINTINGS-NATIVE ART PRODUCTIONS IN THE UNITED STATES—SOUTH KENSINGTON SCHOOL -ROYAL ACADEMY IN LONDON-RISING TALENT IN SCOTLAND ENCOURAGED-SCHOOLS AT MUNICH AND ANTWERP-GREAT AMERICAN PROMISE OF ART

554

PART VII.

FAMOUS MEN AND WOMEN OF THE CENTURY.

CHAPTER XL.

CELEBRATED AUTHORS.

HANS CHRISTIAN ANDERSEN-MATTHEW ARNOLD-GEORGE BANCROFT-GEORGE H. BO-KER-HORATIUS BONAR-EMILY BRONTE-ELIZABETH BARRETT BROWNING-ROBERT BROWNING--WILLIAM CULLEN BRYANT-LORD BYRON-WILL CARLETON-THOMAS CARLISLE—ALICE AND PHOEBE CARY—JAMES FENIMORE COOPER—CHARLES DICKENS— RALPH WALDO EMERSON—EUGENE FIELD—HORACE GREELEY—NATHANIEL HAW-THORNE-I. G. HOLLAND-OLIVER WENDELL HOLMES-TOM HOOD-VICTOR HUGO-RUDYARD KIPLING-H. W. LONGFELLOW-I. R. LOWELL-LORD MACAULAY-EDGAR ALLEN POE-JOHN G. SAXE-SIR WALTER SCOTT-HARRIET BEECHER STOWE-ALFRED TENNYSON-W. M. THACKERAY--MARK TWAIN--J. G. WHITTIER

558

CHAPTER XLI.

DISTINGUISHED ORATORS AND STATESMEN.

BEECHER -- BLAINE -- BRIGHT -- CHOATE -- CLAY -- DEPEW -- DOUGLASS -- EVERETT -- GARFIELD -GIBBONS-GLADSTONE-GOUGH-BRADY-HARRISON-LINCOLN-MCKINLEY-MOODY -REED-SHERMAN-SPURGEON-TALMAGE-VICTORIA-WEBSTER--WILLARD

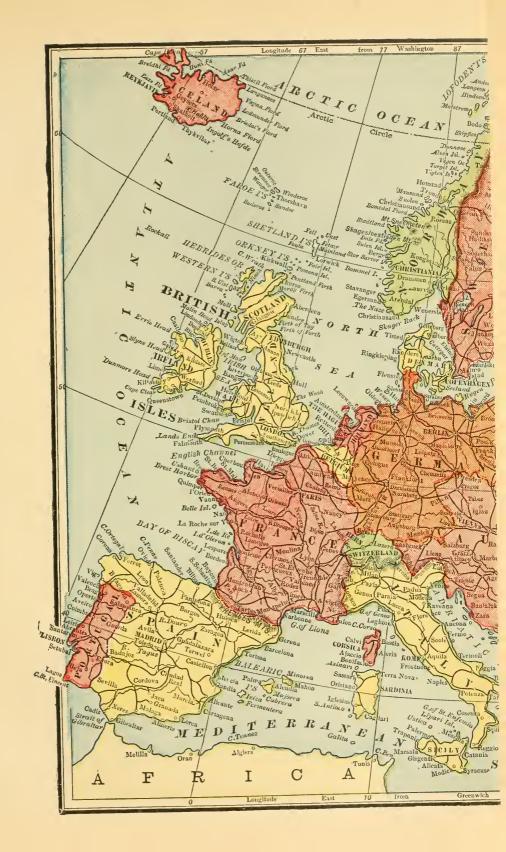
582

CHAPTER XLII.

VARIOUS CELEBRITIES AND THEIR ACHIEVEMENTS.

ARMOUR—BARTHOLDI—BELL—BOOTH—CARNEGIE—CLEVELAND—DEWEY—EDISON—GRANT IACKSON-LEE-MARCONI-MELBA-PATTI-WANAMAKER......... 596 609

Appendix A-Latest Events in the History of the Nineteenth Century... Appendix B—Canada in the Nineteenth Century......





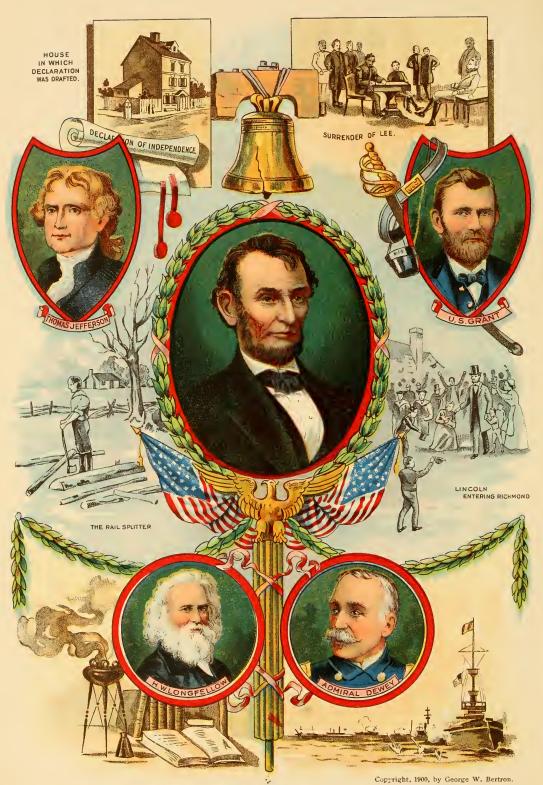












DISTINGUISHED AMERICANS OF THE CENTURY

PART I.

GREAT EVENTS OF AMERICAN HISTORY

IN THE

NINETEENTH CENTURY.

CHAPTER I.

The Louisiana Purchase.

HE Revolution, which resulted in the independence of the United States, was ended by the surrender of Lord Cornwallis and his army of 7,000 men at Yorktown, Va., on October 19th, 1781. The patriots who had won the great struggle then united their efforts in the formation of a new government and a Constitution in line with the principles so boldly asserted in the Declaration of Independence. In 1787 the new Constitution was signed by a convention of the States and was ratified during the following year.

The new government was organized by the election of George Washington as President. As we glance back at that stormy period in our history his majestic figure stands out as the chief of the illustrious founders of our Republic. After twice administering the affairs of the government he died December 14th, 1799. His honored name, embalmed in the hearts of his countrymen, is destined to be venerated so long as our nation endures. One of his distinguished compatriots, Benjamin Franklin, whose important services form some of the brightest pages of our early history, ended his illustrious career on April 17th, 1790.

The administration of John Adams, second President, closed on March 4th, 1801, and on the same date he was succeeded by Thomas Jefferson, author of the "Immortal Declaration." Aaron Burr, regarded by many an only a clever adventurer, was inducted into the office of Vice-President. The new administration made Washington the seat of government, the capitol having been removed to that city during the preceding year.

The Purchase of Louisiana.

The new chief magistrate was soon involved in a transaction of very great importance. Intelligence was received that Napoleon had extorted from Spain the cession of Louisiana, granting in compensation the succession of the Duke of Parma, a Spanish prince, to the grand-duchy of Tuscany. That court had, however, yielded with much reluctance, and only from being overawed by the superior power of France. This intelligence excited great alarm in the American cabinet.

The possession of this territory by Spain, a weak and sluggish power, had been sufficiently harassing; what then might be expected on its transference

to the most stirring and active nation in Europe? Jefferson, knowing the French government to be embarrassed as to funds, conceived the hope, that, for a large sum, they might be induced to part with the territory; and, viewing, the object as of the deepest importance, he was disposed not to be sparing in the amount.

A Great Possession.

Livingston, Pinckney, and Monroe were appointed a commission for carrying on this delicate negotiation. On arriving at Paris, they found their republican profession in bad odor with Napoleon, who, having determined to establish absolute power, regarded them with dislike as demagogues and anarchists. They did not scruple to obviate this by declaring that they considered the present system the most desirable for France after her severe recent agitations. They found the acquisition of Louisiana disapproved in the political circles, yet a favorite object with Napoleon himself. He looked to it as a great colonial possession, which might rival those of England; as a new Egypt —a place of reward for meritorious officers, and of exile for those he suspected.

Mr. King, the ambassador to England, endeavored to stir that court against it; but though dissatisfaction was expressed, no right was there felt to interfere. An expedition of five to seven thousand men was prepared, and Bernadotte appointed to command it. As, however, Napoleon began to contemplate hostile relations with Britain, ais mind opened to the American proposals. He could not hope to maintain this transatlantic possession against her

superior navy; while a large sum of money would be extremely convenient. King, indeed, was warned by Mr. Addington, that the British government would, in that event, take possession of the country.

This was a new ground of alarm; but he gave assurance, that they sought only to keep it from France, and would be guite satisfied with its acquisition by the United States. As hostilities became certain, Napoleon began seriously to negotiate on the subject. The treaty had been opened only with respect to New Orleans, and the territory west of the Mississippi; but he intended that the eastern must also be included, which, indeed, by itself could be of little value to him. This proposal being unexpected, the envoys were unprovided with any instructions; yet, rightly appreciating the great advantage of possessing both banks, they readily consented—a conduct highly approved by the President.

Worth Much More than the Cost.

After a good deal of discussion, the price was fixed at sixty millions of francs, 12,500,000 dollars, and the States were besides to pay twenty millions of francs, 4,000,000 dollars, of indemnity for injurious captures; making in all 16,500,000 dollars. The sum, though considerable, bore little proportion to the vast advantages which have since been reaped from the acquisition.

Jefferson, although gratified by this arrangement, felt a good deal embarrassed in laying it before Congress. No power to conclude such a treaty was conveyed by the Constitution, and he was one who specially deprecated the general government going a step beyond its

assigned functions. Congress, however, with the exception of a small minority, showed too much satisfaction at the event to be at all disposed to criticise its legality. Spain only, who still held possession of the country, and had certainly been treated with very little ceremony, made a strong remonstrance, that she had ceded it under the engagement of its never being alienated, and that the terms even had not been strictly fulfilled. She gave in afterwards a solemn protest to the same effect.

The American government turned a deaf ear to such representations, and even prepared to assert the claim by arms. Napoleon, on hearing of this dispute, intimated, that unless the Spanish government yielded, he would join America in compulsory measures. This was enough for that court, who, on the 10th of February, 1804, intimated, through her minister, Don Pedro Cevallos, that her opposition was withdrawn.

American Prisoners at Tripoli.

Public attention was now called to another subject, which had long caused uneasiness and irritation. The piratical states of Barbary, whose career had hitherto encountered no serious check, had been committing extensive depredations on American commerce. They had even intimated an intention not to discontinue them without a tribute, to which the nation was little inclined. As Tripoli had been particularly active, Commodore Preble, in 1803, was sent against it with a fleet of seven sail.

On his arrival, Captain Bainbridge, with the frigate Philadelphia, was employed to reconnoitre the harbor; but proceeding too far, his vessel grounded,

and fell into the hands of the enemy. He and his crew were made prisoners, and treated with the usual barbarity.

The expedition was thus at a full stand, when Captain Eaton, consul at Tunis, intimated that the throne of Tripoli was disputed by Hamet Caramalli, a brother of the bashaw who had found refuge and been well received in Egypt. He proposed and was permitted to join this prince, commanding the co-operation of the fleet. Eaton soon obtained Hamet's concurrence, and, early in 1805, was invested with the command of a body of troops which the latter had succeeded in raising.

"My Head or Yours."

He marched across the desert of Marmorica, summoned the frontier fortress of Derne, and, though the commander made the defying reply, "My head or yours," overpowered him after a few hours of desperate fighting. On May 8th, the reigning bashaw came up with a strong force, and attempted to recover the place, but was repulsed; and on June 10th he sustained another defeat. Immediately after, the American fleet was reinforced by the frigate Constitution. While affairs thus wore a triumphant aspect, and the capital was in aların of immediate attack, Colonel Lear, the consul, thought it most prudent to listen to overtures from the enemy and conclude a peace. preliended the delivery of the prisoners on both sides; there being a balance of two hundred in favor of the bashaw, for which sixty thousand dollars were to be paid. All co-operation was to be withdrawn from Hamet, in whose favor it was only stipulated, that his wife and children should be released.

That prince made loud complaints, under which Jefferson evidently felt considerable uneasiness. He urged, indeed, that no pledge had been given for his restoration to power; and that his force, though so far successful, was not adequate to that achievement. Concerted movements may take place against a common enemy without any mutual guarantee of each other's objects; yet, where both have effectively co-operated, each seemingly may claim a share of the advantage; and that of Hamet, on the present occasion, appeared exceedingly slender.

Jefferson Re-elected.

In the end of 1804, Jefferson's first term of office expired. His conduct having been altogether approved, and the democratic spirit being still predominant, he was re-elected by one hundred and sixty-two votes out of one hundred and seventy-six. Burr, who had disgusted the ruling party by his conduct at the last election, was thrown out, and Clinton of New York, a Democrat so decided that he had even opposed the formation of the Union, was elected in his place.

Burr, disappointed in this quarter, sought compensation by standing as candidate for governor of New York. was supported by a large body of the Federals; but Hamilton, a man of high and honorable mind, despising him as a reckless adventurer, opposed and defeated his election. The disappointed candidate, taking advantage of some violent language said to have been used by his opponent, sent him a challenge. The parties met, and at the first fire Hamilton fell. No event ever excited a more general feeling of regret through-

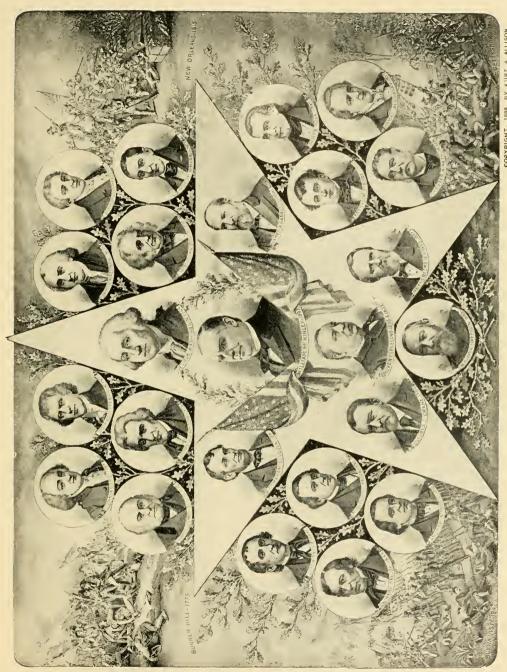
out the States, where, in the party most adverse to him, his high bearing, splendid talents, and political consistency, commanded general respect.

Burr, however, restlessly sought some means of attaining distinction and power. In September and October, 1806, Jefferson learned that mysterious operations were proceeding along the Ohio; boats preparing, stores of provisions collecting, and a number of suspicious characters in movement. A confidential agent sent to the spot warned the President that Burr was the prime mover; and General Wilkinson, who commanded near New Orleans, intimated that propositions of a daring and dangerous import had been transmitted to him by that personage.

Burr's Treasonable Plot.

The ostensible pretext was, the settlement of a tract of country said to have been purchased on the Washita, a tributary of the Mississippi; but the various preparations, the engagement for six months only, the provision of muskets and bayonets, pointed to something altogether distinct. It was either the formation of the western territory into a separate government, or an expedition against Mexico, sought to be justified by a boundary difference that had arisen with Spain, whose troops had actually crossed the Sabine.

The former project, if entertained, was given up, no encouragement being found in the disposition of the people; and Burr's views were then confined to the seizure of New Orleans, and collecting there as large a force as possible for his ulterior design. His partisans abstained from all violence, and made their designs known only by





CNE ON THE OUTWORKS OF THE FAMOUS FORTRESS OF SEBASTOPOL WAS THE MALAKOFF, WHICH HAD BEEN STRONGLY FORTIFIED BY CAPTURE OF THE MALAKOFF BY THE FRENCH IN THE CRIMEAN WAR THE RUSSIANS. IT WAS TAKEN BY ASSAULT AFTER A SIEGE OF MORE THAN TEN MONTHS



COPYRIGHT, 1886, BY KURZ & ALLISON

BATTLE OF TIPPECANOE

BENERAL HARRISON WAS ATTACKED BY TECUMSEH AND THE INDIANS WERE ROUTED WITH GREAT SLAUGHTER

mysterious conversations; so that, on being apprehended and brought to trial in Kentucky, he obtained a verdict of acquittal. The governor of Ohio, however, seized a quantity of boats and stores; and strict watch was kept along the whole line.

Burr was only able, on the 25th of December, to assemble at the mouth of the Cumberland river, from sixty to a hundred men, with whom he sailed down the Mississippi. General Wilkinson had been instructed to settle the Spanish difference as soon as possible, and direct all his attention to securing New Orleans, and suppressing this enterprise. Burr, therefore, finding no support in the country, was unable to resist the force prepared against him; his followers dispersed, and he himself, endeavoring to escape, was arrested on his way to Mobile. He was tried on a charge of treason; but the chief justice was of opinion that, though Blanerhasset, his coadjutor, had openly announced the project of attempting the separation of the States, there was not sufficient proof that Burr himself contemplated more than the Mexican expedition, which amounted only to the levying of war against a power with whom the country was at peace.

Believed to be Guilty.

He was thus acquitted of the main charge; yet Jefferson expressed himself as much dissatisfied with the sentence, declaring his conviction of Burr's guilt in every particular. The acquittal appeared to him to have been prompted by that ultra-federal spirit with which he always charged the Supreme Court. Burr went to Europe, and never again

appeared on the political theatre of the States.

About this time arose discussions that led to a long series of troubles. The contest which had arisen between France and England spread over the Continent, and was attended, on the part of Napoleon, with such signal triumphs, as rendered him virtually its master. But, while all Europe bent beneath his sway, he was goaded to madness by seeing Britain stand erect and defiant, while not a vessel could leave one of his own ports without almost a certainty of capture.

A struggle now ensued, very different from that hitherto waged between European kingdoms, when some exterior provinces or appendages only were disputed. It was a question of empire on one side and existence on the other; and each party thought itself entitled to employ extreme means, and to pass the limits hitherto sanctioned by the practice and public law of Europe.

Struggle Between Giants.

Napoleon, viewing his mighty rival as resting solely upon commerce, imagined, that if he could exclude her merchandise entirely from the Continent. the root of her power would wither, and she would fall an easy victim. His adversary, on the other hand, conceived the hope, that by depriving the countries under his sway of all the benefits of trade, a spirit of discontent would be roused that might prove fatal to his dominion. Both parties inflicted on themselves and on each other severe sufferings; and the hopes of both proved finally abortive. Britain remained mistress of the seas, and Europe still lay at the feet of Napoleon. Yet each persevered, in the hope that the desired result was in silent operation, and that by a continuance of effective means it might at last arrive.

America had at first derived extraorlinary advantages from this warlike attitude of Europe. The most active, and finally almost the only maritime neutral power, she had reaped a rich harvest by engaging in the commerce between the ports of the belligerent states, and kept an extensive shipping employed in this carrying trade.

Blow at American Commerce.

But a severe reverse was felt under these new measures, when her vessels could not appear in any of the seas of Europe without being liable to capture by one nation or the other. The proclamations of both were equally rigorous; but Britain possessed so much more means of carrying hers into execution, that they were the most severely felt.

Another grievance was endured from the same quarter. The great extension of the American shipping interest offered ample employment to British seamen, who, by entering this service, obtained higher wages and escaped the hardship of serving by impressment in ships of war. Britain therefore claimed and exercised the right of searching American vessels for these deserters, and, whenever grounds of suspicion appeared, of calling upon them for proofs of American origin. She contended that the desertion, if unchecked, would proceed on so vast a scale, that the navy, her grand means of defence, would be entirely crippled.

The other party complained, that not only was the national flag thus violated, but American citizens were, under this pretext, seized and carried to distant ports, where they could not procure proofs of their origin, and those ac tually produced were not duly regarded. In a report to Congress, it is stated, that the number impressed since the beginning of the war had been four thousand two hundred and twentyeight, of whom nine hundred and thirty-six had been discharged. It was alleged, that by far the greater proportion of these were native Americans, and that in six hundred and ninetyseven recent cases, only twenty-three were British and one hundred and five doubtful: but to these statements it seems impossible not to demur.

The first encroachment on the liberty of commerce was directed against the transportation of the produce of the French West Indies to the mother country.

Trouble with Great Britain.

It was maintained by Britain, that the Americans, having been formerly excluded from this employment, and admitted to it only in consequence of the war, could not complain of losing a branch which they had never enjoyed; while they urged, that the war had conferred on Britain no new right to interpose. They entertained hopes of gaining their object in consequence of Mr. Fox's accession to power, in 1806. That statesman even told Monroe, then ambassador, that he had ordered the practice of impressment to be suspended, but was not prepared to yield up the right.

Jefferson, encouraged by this intelligence, added Pinckney to the embassy, with the view of concluding a final arrangement. On his arrival, however, Fox had been siezed with that illness which terminated in his death. The commission were received by Lord Grenville, to whom the subject was new, and who was pressed by the duties of other departments. Soon however, Lords Holland and Auckland, being named commissioners to carry on the negotiations, expressed the most conciliatory disposition, but stated, that as all the law officers were in favor of the right of impressment, it could not be formally conceded, but would be exercised with greatest caution.

Agreed to Sign the Treaty.

The Americans finding more was unattainable, while terms that appeared satisfactory could be secured on other subjects, at length agreed to sign the treaty. On its being transmitted to Jefferson, however, he at once determined on refusing to ratify it, without even the usual course of submitting it to the Senate. This, he conceived, when his own mind was completely made up, would have been an empty form. He, therefore, sent it back, with instructions that an attempt should be made to obtain at least a partial abolition, and also stating modifications which he considered necessary in several of the other articles. He continued the same negotiators, and did everything in his power to soothe Monroe, hitherto his favorite diplomatist, who could but feel deeply wounded on this occasion.

The estrangement caused by this step was aggravated by a tragical incident. Admiral Berkeley, then commanding British vessels on our coast, having learned that several men belonging to his squadron were on board the United States frigate Chesapeake, gave direc-

tions for their seizure by Captain Humphreys, of the Leopard. That officer came up to the American vessel soon after it had sailed from Hampton Roads, Virginia, and sent a boat's crew on board, asking permission to search for the British deserters; Barron, the commander, replied, that he could not. allow his men to be mustered by any other than himself. The boat returned, when a fire was opened from the Leopard, which the American, being totally unprepared for, was unable to return. In the course of twenty or thirty minutes, he endeavored to fit his vessel for action, but not having succeeded, and three of his men being killed and eighteen wounded, he struck his flag-

Offered to Give up his Ship.

To a British officer, who came on board, he offered his vessel as a prize; but the other disclaimed any such view. and delived a letter from Humphreys, deploring a loss which might have been avoided by amicable adjustment. He then took out four men, three of whom were alleged to be Americans, and departed. Berkeley had committed a gross error in authorizing such a proceeding against a government armed vessel, respecting which the right of search had never been claimed. A loud and general clamor, in which all parties joined, was raised throughout the country; and Jefferson issued a proclamation, excluding British ships of war from all the waters of the United States.

The English foreign secretary disavowed the action of Captain Humphreys offered reparation, and recalled Admiral Berkeley. England, however, would not give up the right of search, but instructed her officers to use no unnec-

essary violence in enforcing it. The reparation promised was never made.

Affairs in Europe, meantime, were assuming a still more serious aspect. Napoleon, after his victory at Jena, and entry into Berlin, which placed him in a most triumphant position on the continent, became still more eager to crush the only power that still defied him. In November, 1806, he issued a decree, declaring the British isles in a state of blockade; this was retalliated by an order in council on January 2, 1807, prohibiting the trade by neutrals from any port under his sway to another.

Napoleon Enraged.

On the 11th of November, a fresh order declared, that all these countries were to be considered in a state of blockade: but some mitigations were afterwards admitted in regard to vessels willing to trade through the British ports, after paying a certain duty. These terms, however, were repelled by America, as a levying of tribute, and as altogether inconsistent with the independence of her flag. Enraged at this farther measure, Napoleon, on December 17, 1807, issued at Milan, another decree, subjecting to confiscation every vessel which should have submitted to the conditions imposed by England.

America was thus placed certainly in a hard situation, being unable to send out a vessel to sea, which was not liable to capture by either belligerent. She might have been fully justified in imposing severe restrictions on the shipping and commerce of the offending parties; but instead of this, Jefferson proposed and was supported by his party in carrying the measure of an embargo, to be laid for an indefinite period

on all our vessels within the ports of America, by which they were prohibited from departing for any foreign port.

This step was marked by the singular fact that it was carried by the interior and agricultural States, against the most violent opposition from the northern and commercial ones, though the latter were almost the exclusive sufferers. They were told, indeed, that the object was to procure for them redress, and that their vessels, thus detained in port. would be saved from capture and confiscation. They thought, however, that they might have been consulted as to their own interests, and not have had a remedy imposed which was deemed by them ten times worse than the evil. The embargo was repealed in 1809, but commercial intercourse was forbidden with England and France.

Slave Trade Abolished.

Besides the acquisition of the great Louisiana territory, Mr. Jefferson's administration is memorable for the extinction of the African slave trade, the importation of slaves having been forbidden by law in 1808. The policy was then first introduced of purchasing from the diminishing Indian tribes the lands which they claimed, and removing the Indians to special districts, or "reservations," set apart for them. In this way large tracts of territory were gained from the scattered tribes both north and south of the Oliio.

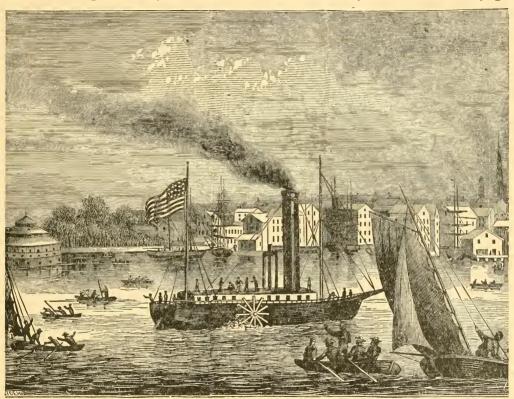
Thus it will be seen that within a period of twenty-five years from the close of the Revolutionary War our country was again agitated and disturbed, and there were ominous mutterings of war both England and with

France. Mr. Jefferson, who was not without suspicion of sometimes favoring measures for political effect, resisted with all the powerful resources of his mind and with his commanding influence the aggressions of Great Britain.

From the succeeding pages the reader will learn that the statements already made are but preliminary to the second

present. Never did a flag have more enthusiastic or ardent defenders than the Stars and Stripes.

In the year 1807 a great change was made in the system of navigation by Robert Fulton, a native of Pennsylvania, who built and successfully navigated the first steamboat. He named it the "Clermont," and made the voyage



ROBERT FULTON'S FIRST STEAMBOAT.

conflict between the United States and Great Britain. A people who at such sacrifice and cost of blood had gained their independence were not in a mood to tolerate any violation of their lawful rights.

period of our history the true American spirit was born—born in conflict and the shock of battle—and has characterized our nation from that time to the

from New York to Albany, a distance of about one hundred and fifty miles, in thirty-six hours. From this time steam navigation rapidly superseded the old system of sailing vessels in the waters of the United States and exercised a powerful influence in the development of the wealth and prosperity of the country. Fulton's was the first great invention of the century.

CHAPTER II.

Our Second War with Great Britain.

HE most important events in our country's history during the early part of the century were connected with what is commonly called the war of 1812. James Madison, having served one term as President, was inaugurated for a second term on the 4th of March, 1813. War against Great Britain had been declared on the 18th of June before, and was then going on.

At the time the war was declared, the prevailing idea was that England was to be brought to terms by the seizure of her neighboring provinces on the northern boundary of the United States. was the only vital point at which it was expected that the United States could deal telling blows. Little or nothing was expected from any contest on the ocean. The United States navy, of less than thirty frigates and sloops-of-war in commission, even with the new additions ordered, could not, it was supposed, cope with England's fleets of a thousand sail. All that was expected of these was to aid the gun-boats in coast defence, and in preventing a land invasion; while they might, also, in conjunction with privateers put in commission, cripple the enemy to some extent by the destruction of their commerce on the high seas.

But the capture of the Canadas was looked upon as an easy prize. It was with this view that the army was organized, and active preparations made. The chief command of all the forces was assigned to General Henry Dearborn, of Massachusetts. His position was to be on the eastern end of the line;

the forces on the west end were assigned to General William Hull, then Governor of Michigan; those in the centre, or middle, of the line, were assigned to General Stephen Van Renssalaer. They were all to co-operate in their movements, with a view to Montreal as an ultimate objective point.

Detroit Fortified.

On this line of policy, General Hull had, early in July, 1812, concentrated an army of about 2,500 at Detroit. On the 12th of that month he crossed over and took possession of the village of Sandwich. Here he issued a very famous proclamation, and remained until the 8th of August, when upon hearing that Fort Mackinaw, on the river above Detroit, had been taken by the British and Indians, he recrossed the river and again took position at Detroit. A few days after this, General Brock, Governor of Upper Canada, who had called out a force, took his position at Malden. On the 15th of August he erected batteries on the opposite side of the river, but in such position as to bring the town of Detroit within the range of his guns, and demanded of Hull a surrender of the place.

Colonel McArthur and Colonel Lewis Cass had been sent off on detached service, with a small force, on the river Raisin, a few days before, by General Hull. Captain Bush, of the Ohio volunteers, had also, with a small force, been sent off on similar detached service. These detachments were recalled by General Hull on the 15th. On the

16th General Brock commenced crossing the river with his forces, three miles below the position occupied by General Hull.

When the British had advanced within about five hundred yards of Hull's Ine, to their surprise they saw the display of a white flag. An officer rode up to inquire the cause. It was a signal for a parley. A correspondence was opened between the commanding generals, which speedily terminated in a - capitulation on the part of Hull. The fortress of Detroit, with the garrisons and inunitions of war, were surrendered. The forces under Cass and Mc-Arthur, and other troops at the river Raisin, were included in the surrender. Captain Bush, however, not considering himself bound by Hull's engagement, broke up his camp and retreated towards Ohio.

A Base Surrender.

The army surrendered by General Hull amounted to 2,500 men. General Brock's entire command consisted of about 700 British and Canadians, with 600 Indians. This unaccountable conduct of Hull filled the whole country with indignation. As soon as he was exchanged, he was brought to trial by court-martial. He was charged with treason, cowardice, and neglect of duty, but found guilty only of the two latter charges. He was sentenced to be shot, but his life was spared in consideration of gallant services in his younger days.

By the surrender of Hull, the whole Northwestern frontier was exposed, not only to British invasion, but Indian depredations of the most savage character. Great alarm spread throughout all the neighboring States. Not less than ten thousand volunteers tendered their services to the government for defence. These were accepted and placed under command of General William Henry Harrison, who had succeeded Hull.

Battle of Queenstown.

After Hull's disaster, General Van Rensselaer, who had command, according to the original plan, of the centre of the invading line, made a movement over the Canada border. His forces consisted of regulars and militia, and were assembled at Lewistown, on the Niagara river. On the opposite side was Queenstown, a fortified British post. This was the first object of his attack. On the 13th of October, he sent a detachment of a thousand men over the river, who succeeded in landing under a heavy fire from the British. The troops were led to the assault of the fortress by Colonels Christie and Scott.

They succeeded in capturing it. General Brock came up with a reinforcement of six hundred men, and made a desperate effort to regain the fort, but was defeated, and lost his life in the engagement. General Van Rensselaer was now at Queenstown, and returned to carry over reinforcements, but his troops refused to obey the order. Soon after, another British reinforcement was rallied, which recaptured the fort after a bloody engagement, in which the greater part of the thousand men who had first taken it were killed. General Van Rensselaer immediately resigned.

The command of the army of the centre was then assigned to General Alexander Smyth. He was soon at the head of an army of four thousand five hundred men. On the 28th of No-

vember he was ready to move. That was the day fixed for crossing the river. The troops were embarked, but the enemy appearing on the opposite side in considerable force and battle array, a council of war was held, which resulted in a recall of the troops in motion, and a postponement of the enterprise till the ist of December. On that day another council of war was held, at which the invasion from that quarter was indefinitely postponed. General Smyth in turn immediately resigned. So ended the third and last attempt at an invasion of Canada, during the fall and winter of 1812.

Exploits of the Navy.

While the military operations on land, from which so much had been expected, bore so gloomy an aspect, quite as much to the surprise as to the joy of the country, the exploits of the gallant little navy, in its operations on sea, from which very little had been looked for or hoped for, were sending in the most cheering tidings.

These may be thus stated: First.— On the 19th of August, 1812, three days after the disastrous surrender of Detroit by General William Hull, of the army, a most brilliant victory was achieved off the Gulf of St. Lawrence, by Captain Isaac Hull, of the United States frigate Constitution, and coming up with the British man-of-war Guerriere, under the command of Captain Dacres, at the time and place stated, an engagement immediately ensued. The fight was a desperate one, and lasted for some time. But the result was the triumph of Hull and his gallant men. Dacres surrendered; but the Guerriere was too much disabled to be brought into port, and was blown up at sea. The loss of the Constitution in men was seven killed and seven wounded; the loss of the Guerriere was fifty killed and sixty-four wounded; among the latter was Captain Dacres himself.

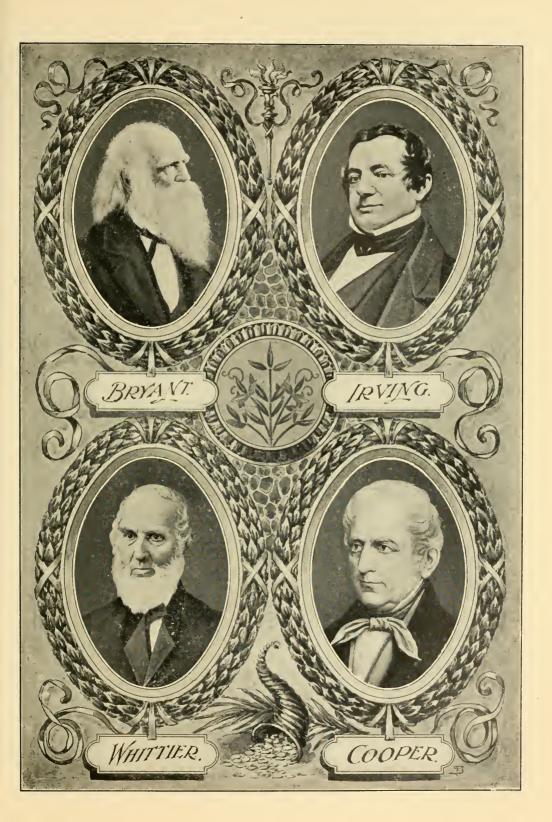
About the same time, Captain Porter, in command of the United States frigate Essex, met and captured the British sloop-of-war Alert, after an action of only eight minutes.

Second. On the 18th of October, Captain Jones, in command of the United States sloop-of-war Wasp, of eighteen guns, met and captured the British sloop-of-war Frolic, of twenty-two guns, after a hard-fought battle of forty-five minutes, losing but eight men, while the loss of his enemy, in a vessel one-third his superior, was eighty men.

Capture of a British Frigate.

Third. On the 25th of October, Captain Decatur, in command of the frigate United States, of forty-four guns, met and captured the British frigate Macedonian, mounting forty-nine guns and manned by three hundred men. action continued an hour and a half. The loss of the Macedonian was thirtysix killed and sixty-eight wounded; while the loss on the United States was only seven killed and five wounded. The Macedonian was brought into New York, and the gallant Decatur, who, when lieutenant, had so signally distinguished himself at Tripoli, was welcomed with the applause and honors which he had so nobly won.

Fourth. On the 29th of December the Constitution, familiarly called by the sailors Old Ironsides, then in command of Commodore Bainbridge, had another encounter at sea. This was







NAPOLEON AT LUTZEN-1813.



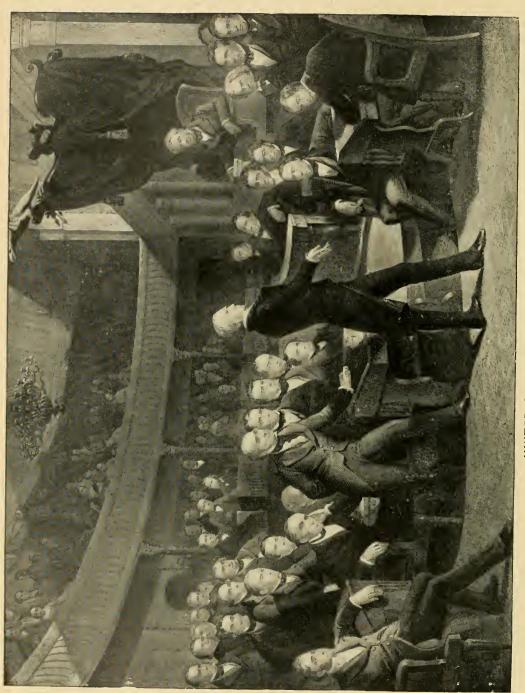
EATH OF PAKENHAM AT NEW ORLEANS-1815.



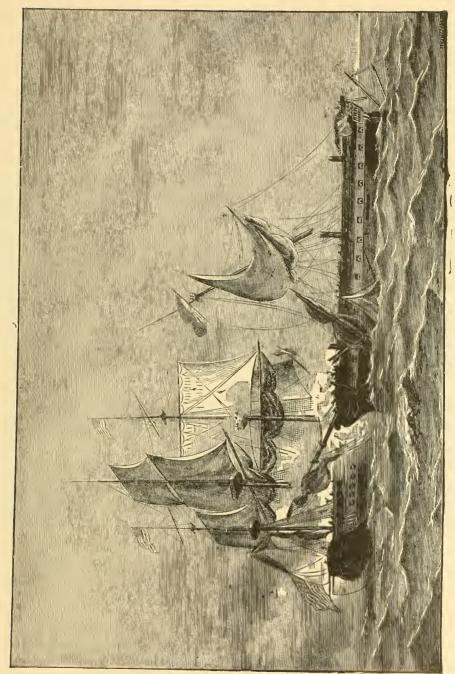
BATTLE OF INKERMAN -1854.



A NATION'S PRIDE AND A NATION'S WEALTH



WENRY CLAY MAKING HIS FAMOUS SPEECH ON THE MISSOUR! COMPROMISE. SEATED IN THE SECOND ROW BEHIND HIM IS DANIEL WEBSTER, ON THE RIGHT OF THE ENGRAVING IN A GROUP OF THREE, IS JOHN C. CALHOUN, AND VICE-PRESIDENT FILLMORE OCCUPIES THE CHAIR UNITED STATES SENATE IN 1850



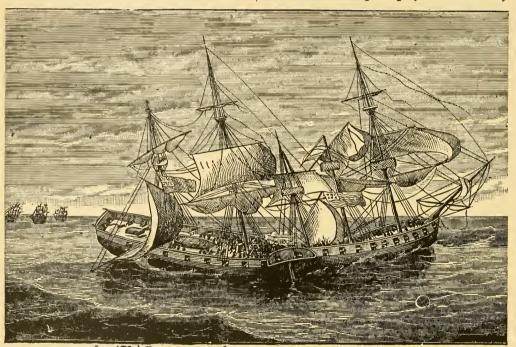
CAPTURE OF THE GUERRIERE BY THE CONSTITUTION

with the British frigate Java, of thirtyeight guns. The action was fought off
San Salvador, and lasted three hours.
The Java was dismasted and reduced to
a wreck, losing one hundred and sixtyone killed and wounded, while the loss
of the Constitution in killed and
wounded was but thirty-four.

Fifth. In addition to these victories of the public vessels, United States privateers, fitted out under letters of

to the time of Mr. Madison's inauguration for a second Presidential term. Soon after this, on the 8th of March, 1813, the Russian Minister at Washington, Mr. Daschcoff, communicated to the President of the United States an offer from the Emperor Alexander of his mediation between the United States and Great Britain, with a view to bring about peace between them.

Mr. Madison promptly and formally



THE WASP BOARDING THE FROLIC.

marque, succeeded in severely distressing the enemy's commerce, capturing about five hundred of their merchantmen and taking three thousand prisoners during the first seven months of the war. England, as Napoleon had predicted, had found an enemy which was ably contesting her supremacy as mistress of the sea.

Such was the aspect of affairs on land and sea in the progress of war up

accepted the Russian mediation, and appointed Mr. Gallatin, John Quincy Adams and James A. Bayard, commissioners to negotiate a treaty of peace with Great Britain, under the auspices of the tendered mediation. Messrs. Gallatin and Bayard soon set out on the mission to join Mr. Adams at St. Petersburg, where he was then resident Minister of the United States. The British Government declined the medi-

ation, and nothing came of this com-

The first session of the Thirteenth Congress met on the 24th of May, 1813. The principal business of this Congress was to provide means to carry on the war and sustain the public credit. Direct taxes and excises were again resorted to. The expenditures of the war had greatly exceeded the estimates. New loans had to be made and pro-The public finances were vided for. in a state of much embarrassment; treasury notes issued according to act of Congress were at a great discount; the loans authorized by the Government were paid in depreciated currency: all the banks in the Union had suspended specie payments, except some in the New England States. Proper arms and clothing for the militia when called into the field were both wanting. Already the war spirit was beginning to abate in several quarters, especially in New England.

Canada Invaded.

Still the invasion of Canada was the leading object of the administration. The campaign planned for this purpose in 1813 was similar to that of 1812. The operations extended along the whole northern frontier of the United States. The army of the West, under General Harrison, was stationed at the head of Lake Erie; that at the east end of the line, under the command of General Hampton, on the shore of Lake Champlain; while that of the centre, under Dearborn, the commander-inchief, was placed between the Lakes Ontario and Erie.

The result of this campaign, in view Lake Erie, fought on the 10th of Sepof its main object, the conquest of tember. This was a naval engage-

Canada, was very little more successful than that of the year before. There were many movements and countermovements of forces, advances, retreats and sieges, with some pitched batties, in which great valor was displayed, but no one of them was attended with any decisive results.

Noted Events.

The most noted events of this campaign may be thus briefly stated: First. The slaughter of the United States prisoners at Frenchtown, in Canada, on the 22nd of January, 1813. Colonel Proctor, the British officer to whom General Winchester had surrendered a force of several hundred men, in violation of his pledge, turned the prisoners over to the vengeance of the Indians; or at least did not restrain his allies, the savages, in their most atrocious acts of barbarity upon their unarmed victims.

Second. The battle of York, or Toronto, in Upper Canada, on the 27th of April, in which the young and gallant United States officer, General Zebulon M. Pike, was killed. He expired in the hour of victory. Third. The siege of Fort Meigs by Proctor, and its successful defence by Harrison in the month of May. Fourth. The subsequent siege of Fort Sandusky by Proctor in the same month, and its like gallant defence by Major Croghan. Fifth. The battle of Sackett's Harbor on the 29th of May, in which the British General Prevost was signally repulsed. Sixth. The capture on the same day of the British Fort George by the United States troops. Seventh. The battle of Lake Erie, fought on the 10th of Sepment, planned and executed by Commodore Perry. Its results stand briefly chronicled in his report of it to General Harrison in these words: "We have met the enemy, and they are ours! two ships, two brigs, one schooner and one sloop."

Eighth. The battle of the Thames, as it is called, fought by Harrison on the 5th of October, and in which he gained a complete victory. It was in this battle that the famous Indian warrior Tecumseh was killed by the hands of Colonel R. M. Johnson, of Kentucky. Soon after this General Harrison resigned his commission and retired from the service. General Dearborn had previously resigned, when the chief command had been conferred upon General James Wilkinson.

Indians in Arms.

Meanwhile the Creek Indians in Georgia and Alabama had taken up arms. On the 30th of August they had surprised Fort Mims on the Chattahoochee river, and massacred nearly three hundred persons, men, women and children. The militia of Georgia and Tennessee were called out. Those of Georgia were under the command of General John Floyd: the whole were under the direction of Andrew Jackson, of Tennessee, with the commission of Major-General. Floyd had two engagements with the enemy; one at Callabee, the other at Autossee. Both were successful. Indian town of Autossee was burned by him on the 20th of November. tachment of the Tennessee forces, under General Coffee, had an engagement at Tallusahatchee on the 3d of November. in which two hundred Indians were killed. His success was complete. On

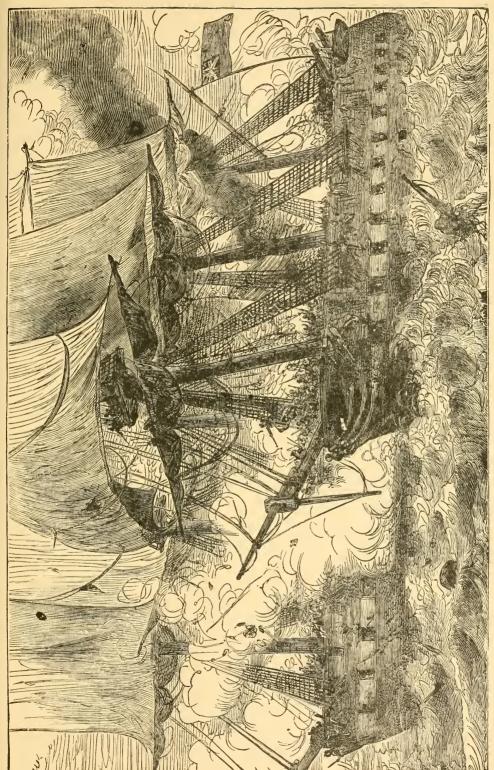
the 8th of November the battle of Talladega was fought under the immediate direction of Jackson himself. This was another complete victory.

Completely Defeated.

Soon after, another fight was had at Emuckfau, with a like result. The Indians rallied again, and made their last stand at a place known as "The Horseshoe Bend," or, as they called it, "Tohopeka," on the Tallapoosa river. Here they were completely crushed by Jackson in his great victory of the 27th of March following. A treaty of peace with them was soon after made. The speech of their chief warrior and prophet Witherford, on the occasion of his surrender to General Jackson, and as reported by him at the time, deserves perpetuation.

"I am," said he, "in your power. Do with me as you please. I am a soldier. I have done the white people all the harm I could. I have fought them, and fought them bravely. If I had an army, I would yet fight, and contend to the last. But I have none. My people are all gone. I can now do no more than weep over the misfortunes of my nation. Once I could animate my warriors to battle; but I cannot animate the dead. My warriors can no longer hear my voice. Their bones are at Talladega, Tallusaliatchee, Einuckfau, and Tohopeka. I have not surrendered myself thoughtlessly. Whilst there were any chances for success, I never left my post, nor supplicated peace. But my people are gone; and I now ask it for my nation and for myself."

The operations on the sea in 1813 continued, upon the whole, to add lustre to the infant navy of the United States.



FIGHT BETWEEN THE CHESAPEAKE AND THE SHANNON.

33

The most noted of these, the successful as well as the adverse, were as follows:

First. Captain Lawrence, of the United States sloop-of-war Hornet, on the 24th of February, met and captured the British brig Peacock, in a conflict that lasted only fifteen minutes. The Peacock, in striking her colors, displayed, at the same time, a signal of distress. Captain Lawrence made the greatest exertions to save her crew, but she went down before all of them could be gotten off, carrying with her three brave and generous United States seamen, who were extending their aid.

A Famous Victory.

Second. On the 1st of June, the British frigate Shannon captured the United States frigate Chesapeake. The Chesapeake at this time was in the command of Lawrence. Every officer on board of her was either killed or wounded. Lawrence, as he was carried below, weltering in blood, and just before expiring, issued his last heroic order -- "Don't give up the ship!" But the fortunes of battle decided otherwise.

Third. The British met another like success on the 14th of August, in the capture of the United States brig Argus, by the Pelican. The Argus had carried Mr. Crawford, United States Minister, to France, in the month of May; after which she made a orilliant cruise, capturing more than twenty of the enemy's ships, when she was in turn captured, as stated. Her colors, however, were not struck in her last engagement, until Captain Allen, in command, had fallen mortally wounded.

Fourth. In September the United States brig

British brig Boxer, on the coast of Maine, and after an engagement of forty minutes the Boxer surrendered. The commanders of both vessels fell in the action, and were buried beside each other in Portland, with military honors.

Fifth. During the summer Commodore Porter, of the frigate Essex after making many captures of British merchantmen in the Atlantic, visited the Pacific ocean, where he was no less signally successful.

Sixth. During the same summer, British fleets entered the waters of the Delaware and Chesapeake bays, under the command of Admiral George Cockburn. All small merchant ships within their reach were destroyed, and much damage done to many of the towns on the coast. Frenchtown, Georgetown, Havre de Grace and Fredericktown were burned. An attack was made upon Norfolk, which was repulsed with heavy loss. After committing many barbarities at Hampton, Cockburn, with his command, sailed south All the ports north, to the limits of the New England coast, were kept in close blockade.

Peace Commission

During the session of the Congress, which convened in December, 1813, a communication was received from the British government, of the purport that, although they had declined to treat under the mediation of Russia, yet they were willing to enter into direct negotiations either in London or Gottenburg. The offer was immediately acceded to, and the latter place appointed for the meeting. Henry Clay and Jonathan Russell were added to the Com-Enterprise met the missioners who had already been sent to Europe. The place of meeting was afterwards changed from Gottenburg to Ghent.

The country at this time was feeling sorely the ills of war everywhere. New loans had to be made; increased taxes had to be levied; more troops had to be raised. The conquest of Canada was still the chief object of the administration.

Events of the Campaign.

The plan of the campaign of 1814 was projected by General Armstrong, the Secretary of War. The Department of War was temporarily removed to the frontier, and established at the headquarters of the army on the Canada line. The operations in this quarter during this year, as those of 1813, were attended with many marches and counter-marches, and much gallant fighting on both sides, but without any decisive results on either. The most noted events connected with them may be thus summed up

First. The advance of Wilkinson into Canada commenced in March, and ended with the affair at La Colc Mill, on the 31st of that month, in which he was defeated with heavy loss. Soon after this he was superseded, and the chief command given to General Izard.

Second. The battle of Chippewa, which was fought on the 5th of July by General Brown, and in which the United States forces won the day.

Third. The battle of Bridgewater, or Lundy's Lane, which was fought on the 25th of July. It was here that Colonel Winfield Scott, in command of a brigade, so signally distinguished himself. Two horses were shot under him and he himself was severely

wounded, but was more than compensated by the victory achieved. Congress voted him a gold medal, and he was soon promoted to a major-general-ship.

Fourth. The battle of Fort Erie, fought on the 15th of August, in which the British General Drummond was repulsed with great loss.

Fifth. The battle of Plattsburg, which was fought on the 11th of September. This was a joint land and naval action. General Macomb commanded the United States land forces at this place; General Prevost commanded those of the British. United States naval forces were commanded by Commodore MacDonough: the British fleet was commanded by Commodore Downie. The assault was commenced by Prevost with his land forces. As Commodore Downie moved up to assist with his fleet, he was met and engaged by MacDonough with his small flotilla.

Capture of the British Fleet.

The chief interest of both armies was now diverted from the action on land to that on water, while the conflict between the fleet and flotilla lasted. It continued for upwards of two hours, and was fierce as well as bloody. It ended in the surrender of the British fleet to Commodore MacDonough. Commodore Downie was killed in the fight, and when his flagship struck her colors, the results of the day were decided on land as well as on the water. Prevost immediately retreated. This victory ended all active operations in that quarter.

Meantime, during the summer of 1814 a fleet of fifty or sixty vessels ar-

rived in the Chesapeake bay under Admirals Cockburn and Cochrane, bringing a large land force under General Ross. The design was the capture of the city of Washington. Ross landed five thousand men on the 19th of August, at the head of the Patuxent, and commenced his march overland. There were at the time no forces for defence near the capital. The raw militia were hastily collected and put under General Winder, who met the enemy at Bladensburg. The President and cabinet left the city. Winder with his militia was barely able to retard the advance of Ross. He entered Washington the 24th of August, and burned most of the public buildings, including the President's house and the capitol.

Repulse of the Enemy.

The troops then returned to their shipping, and proceeded up the Chesapeake. Landing at North Point, they advanced on Baltimore. This place was defended by General Striker, with a force consisting mostly of raw militia and volunteers. In an action which took place on the 12th of September, Ross was killed, and his forces retired. After an unsuccessful attack of the British fleet under Cockburn, upon Fort McHenry, which commanded the entrance to the city, the whole army re-embarked and left the bay.

During this bombardment of Fort Mc-Henry by Cockburn, which lasted a night and a whole day, Francis Scott Key, of Baltimore, then detained on board one of the British vessels, whither he had gone on some public mission, as he gazed most anxiously upon the flag of his country, still floating triumphantly on the ramparts in the midst of the heavy cannonading, composed his soulstirring song, the "Star Spangled Banner." The reader will be interested in the accompanying fac-simile of the original song, one of the most famous ever composed, the popularity of which only increases with the lapse of time.

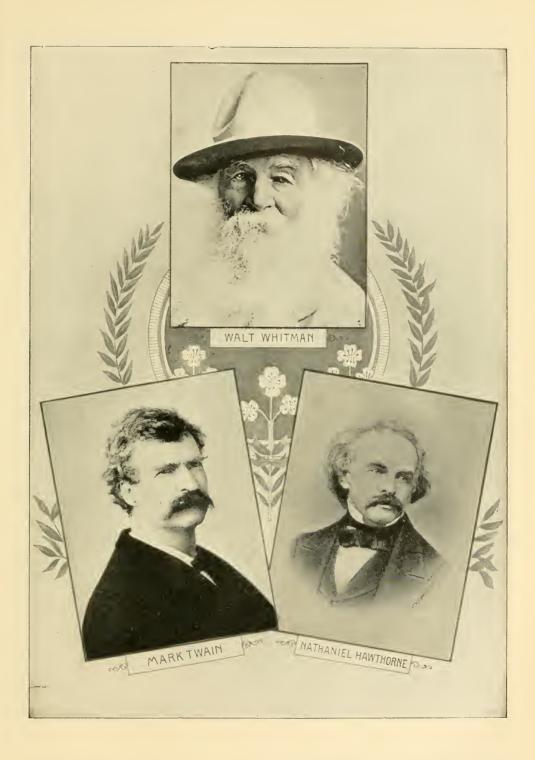
The New England States suffered much in the same way during the summer. Stonington was bombarded, and attempts were made to land an invading force at several places, which were repulsed by the militia.

Gains and Losses.

The operations of the respective navies on the ocean during the year 1814 resulted about as they did in 1813. The United States lost two war-ships and captured five of like character, besides many British merchantmen.

Mr. Gerry, the Vice-President, died suddenly in Washington on the 23d of November of this year. John Gaillard, of South Carolina, succeeded him as President of the Senate pro tempore.

While these events were occurring on land and water, during the summer of 1814, the hostility in the New England States to the Federal administration had ripened into a determination to take decisive steps for the maintenance of their own rights in their own wav. A majority of the people of these States were strongly opposed to the conquest of Canada, Massachusetts and Connecticut, throwing themselves upon their reserved rights under the Constitution, refused to allow their militia to be sent out of their States, in what they deemed a war of aggression against others. especially when they were needed for their own defence in repelling an invasion.





IN JANUARY, 1871, 100,000 FRENCHMEN UNDER CHANZY WERE DEFEATED BY THE GERMANS COMMANDED BY GENERAL CHANZY AT THE BATTLE OF LE MANS

PRINCE FREDERICK-CHARLES OF PRUSSIA

The Ster. Spangled banner

O! Jag , can ge see by the Sawn a early light:
What so proubly we have d by the toologh! det gleaming?
Whose bright sters about stripes, through the clouds of the pight.
O'er the name facts we watched were so gollently streeming
and the nachets at glace the bond buriting on air.
Jave froof through the night that our flag are still there
O's a does that star shangle banner got alone
O'er the land of the free of the bonne of the brave?

Or that shone, demly seen through the musts of the Leep.

No here the foe's haught host in breed sclence reposes.

What is that which the breeze, o'er the tocairing steep

asit folfully blows, half-conceals, half-descloses?

Now it cutches the glarm of the enorming's first beam,

In fall stong reflected now theres on the stream.

Jis the star spangle banner O'lang wag it wome

O'er the land of the four a the home of the brave

And the have of word the lattle's confudione

Of home & a country should there us no more?

Their blood has wasted out their fortfortstep's holletion

No efuge could five the herslup of flane

From the terror of flight or the gloom of the grave

and the standspend banner in triumph Joth areae

O'er the land of the free & the home of the braves

O! They he tower when freemen thell stand
Petruenthen land homes a the war's desolation
Blest with victing a peace may the hear in rescue land
Prairethe power that hath make of poured us a nation
Then conquer we must when our cause it is getting
and this be our moster on god is our trust=
and the star shengled banner in trumph thelt wave
of erthe land of the free and the borne of the brave

Washington, oct 21 -40 Today

For this course they were very severely censured by most of their sister States, and the more so from the fact that the war had been entered upon for the joint maintenance of the rights of their seamen and commerce. Moreover, it was insisted upon by the friends of the administration, that the mode of warfare adopted was the surest for the attainment of the objects aimed at. But what increased the opposition of the New England States at this time was the refusal of the administration to pay the expenses of their militia, called out by the governors of their respective States for their own local defence.

The Hartford Convention.

This refusal was based upon the ground that these States had refused to send their militia out of their limits upon a Federal call. To this may be added the new scheme of the administration for forcing the militia of the respective States outside of their limits, not by a call on the governors of the States for them, but by a general act of Federal conscription, which was considered by many able statesmen and jurists as clearly unconstitutional.

It was in this condition of things that the Legislature of Massachusetts invited the neighboring States to meet in convention for mutual consultation. Accordingly, a convention of delegates from Massachusetts, Rhode Island, New Hampshire, Vermont and Connecticut, met at Hartford, in the latter State, on the 15th day of December, 1814. The deliberations of this famous body were held within closed doors. What the real ultimate designs of the leading members of it were, have never been fully disclosed. Some mystery has ever hung

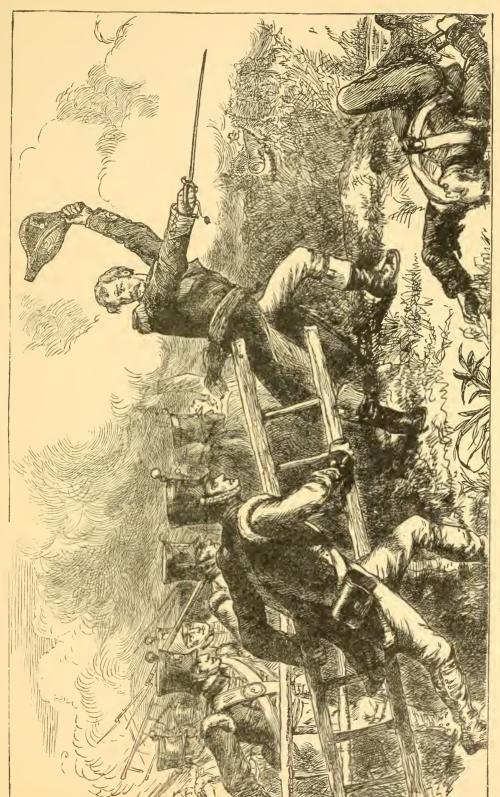
over it. But the resolutions adopted by it, and the public address put forth by it at the time, very clearly indicate that the purpose was, either to effect a change of policy on the part of the Federal administration in the conduct of the war, or for these States, in the exercise of their sovereign rights, to provide for their own well-being, as they thought best, by withdrawing from the Union.

The only positive results of the convention were, the appointment of a deputation of the body to wait upon the Federal authorities at Washington, to whom in person their views were to be presented, and the call of another convention, to which this deputation was to report, before any further decisive action should be taken.

British Force Landed.

In the meantime, it became known that a large British force—of at least twelve thousand men—had been landed at or near the mouth of the Mississippi river, under Sir Edward Pakenham. The country everywhere was in the greatest alarm for the safety of New Orleans. The command of this department was now in charge of General Jackson, with such forces as he could collect, consisting mostly of volunteers and militia, amounting in all to not more than one half the numbers of the approaching foe. He went vigorously to work to repel this most formidable invasion. With such means of resistance as the genius of a "born general" only can improvise, he was soon in an attitude of defence. The result was the ever-memorable charge of the British, and their bloody repulse by Jackson, on the 8th of January, 1815.

This was the most brilliant victory



GENFRAL PAKENHAM LEADING THE ATTACK ON NEW ORLEANS.

achieved by the arms of the United States during the war. Two thousand British soldiers, led in a charge on Jackson's breastworks, were left dead or wounded upon the field. Pakenham himself was killed. Major-Generals Gibbs and Keane, the two officers next in command, were both wounded, the former mortally; while Jackson's loss was only seven killed and six wounded.

The War Ended.

Upon the heels of the news of this splendid achievement, which electrified the country with joy, came the still more gratifying intelligence of a treaty of peace, which the commissioners had effected at Ghent on the 24th of December, 1814, fifteen days before this great battle was fought. All discontents ceased, and in the general joy at this close of the bloody scenes of two years and over, it seemed to be entirely forgotten or overlooked that not one word was said in the treaty about the right of search or impressment by Great Britain, which was the main point in issue at the commencement of the war.

The treaty of peace with England was promptly ratified, and all necessary steps for a disbandment of the army were immediately taken by Congress. But further work was in store for the navy. The Dey of Algiers—in violation of the treaty of 1795—had recently been committing outrages upon American commerce within his waters.

Another war against him was soon afterwards declared. The gallant Decatur was sent with a fleet to the Mediterranean for the chastisement of this piratical power. He in a short time captured two Algerine ships and brought the Dey to terms. A treaty of peace

was made on the 30th of June, by which the United States obtained, not only security for the future, but indemnity for the past.

William H. Crawford, on his return from Paris, where he had been resident United States Minister for some time, was appointed Secretary of War, 1st of August, 1815.

The charter of the first bank of the United States having expired in 1811, and an act for its renewal having failed to pass, several attempts afterwards were made to obtain a charter for a similar institution, which likewise failed. A bill for this purpose, which had passed both houses of Congress, was vetoed by Mr. Madison, in January, 1814. But on the 10th of April, 1816, another bill, of like character, received his approval, by which a new bank of the United States was incorporated for twenty years, with a capital of thirty-five million dollars.

Indiana in the Union.

On the 19th day of April, 1816, an act was passed for the admission of Indiana into the Union as a State.

During the fall of 1816 another Presidential election took place. There was at this time considerable division among the Republicans as to who the successor should be. Mr. Madison had positively declined standing for re-election. The choice of candidates finally made by the Democratic members of Congress in caucus was: Mr. Monroe for President; and Governor Daniel D. Tompkins, of New York, for Vice-President. The Federal party, still so-called, nominated Rufus King of New York, for President; and John Eager Howard, of Maryland, for Vice-President.

The result of the vote of the Electoral Colleges was 183 for Mr. Monroe, and 34 for Mr. King; 183 for Governor Tompkins, and 22 for Mr. Howard. The vote by States between the Democratic and Federal tickets at this election stood: 16 for the Democratic and three for the Federal. The sixteen States that voted for Mr. Monroe and Mr. Tompkins were: New Hampshire, Rhode Island, Vermont, New York, New Jersey, Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia, Kentucky, Tennessee, Ohio, Louisiana, and Indiana. The three that voted for Mr. King were: Massachusetts, Connecticut and Delaware.

After the 4th of March, 1817, Mr. Madison retired from office, leaving the country at peace with the world, and rapidly recovering from the injurious effects of the late war. He returned to his home at Montpelier, Virginia, where he enjoyed the society of his friends and the general esteem of his countrymen.

The most distinguishing feature of his administration was the war with

Great Britain. Whatever may be thought of the wisdom or policy of that war, or of its general conduct, the result unquestionably added greatly to the public character of the United States in the estimation of foreign powers. The price at which this had been purchased was, in round numbers, about one hundred million dollars in public expenditures, and the loss of about thirty thousand men, including those who fell in battle as well as those who died of disease contracted in the service.

Of the amount of private or individual losses no approximate estimate can be made; and though in the treaty of peace nothing was said about the main cause for which the war was prosecuted, yet Great Britain afterwards refrained from giving any offence in the practical assertion of her theoretic right of search and impressment. Whether the same ends could have been attained by any other course which would not have involved a like sacrifice of treasure and blood, is a problem that can never be satisfactorily solved by human speculation.

CHAPTER III.

Drigin and Growth of the Mormons.

MONG the important events in the United States occurring during the century must be mentioned the rise growth of the new and strange sect known as the Mormons, or the Church of Jesus Christ of Latter-Day Saints. It was founded by Joseph Smith, at Manchester, New York, in 1830, and after many vicissitudes finally settled in Salt Lake City in Utalı. Smith was born December 23rd, 1805, at Sharon, Windsor County, Vermont, from which place ten years later his parents, a poor, ignorant, thriftless and not too honest couple, removed to New York, where they settled on a small farm near Palmyra, Wayne County (then Ontario).

Four years later, in 1809, they removed to Manchester, some six miles distant, and it was at the latter place when fifteen years old that Smith began to have his alleged visions, in one of which on the night of 21st of September, 1823, the angel Moroni appeared to him three times and told him that the Bible of the Western Continent, the supplement to the New Testament, was buried in a certain spot near Manchester. Thither, four years later and after due disciplinary probation, Smith went and had delivered into his charge by an angel of the Lord a stone box, in which was a volume six inches thick, made of thin gold plates eight inches by seven, and fastened together by three gold rings.

The plates were covered with small writing in the "Reformed Egyptian" tongue, and were accompanied by a

pair of supernatural spectacles, consisting of two crystals set in a silver bow, and called "Urim and Thummin;" by aid of these the mystic characters could be read.

Being himself unable to read or write fluently, Smith employed as amanuensis, one Oliver Cowdery, to whom, from behind a curtain, he dictated a translation, which, with the aid of a farmer, Martin Harris, who had more money than wit, was printed and published in 1830 under the title of *The Book of Mormon*, and accompanied by the sworn statement of Oliver Cowdery, David Whitmer, and Martin Harris that an angel of God had shown them the plates of which the book was a translation.

They Swore Falsely.

This testimony all three, on renouncing Mormonism some years later, denounced as false; but meanwhile it helped Smith to impose on the credulous, particularly in the absence of the gold plates themselves, which suddenly and mysteriously disappeared.

The Book of Mormon, in which Joseph Smith was declared to be God's "prophet," with all power and entitled to all obedience, professes to give the history of America from its first settlement by a colony of refugees from among the crowd dispersed by the confusion of tongues at the Tower of Babel down to the year 5 A. D. These settlers having in course of time destroyed one another, nothing of importance occurred until 600 B. C., when Lehi, his wife and four sons, with ten friends, all from

Jerusalem, landed on the coast of Chili, and effected a settlement.

FAC-SIMILE, ACCORDING TO JUE SMITH, OF WRITING ON THE ORIGINAL PLATES OF THE "BOOK OF MORMON."

All went well until the death of Lehi, when the divine appointment to the leadership of Nephi, the youngest son, roused the resentment of his elder brothers, who were in consequence condemned to have dark skins and to be an idle mischievous race—hence the North American Indians. Between the Nephites and the bad Hebrews a fierce war was maintained for centuries, until finally, in spite of divine intervention in the person of the crucified Christ, the Nephites fell away from the true faith, and in 384 A. D. were nearly annihilated by their dark-skinned foes in a battle at the hill of Cumorah in Ontario county, New York.

Among the handful that escaped were Mormon and his son Moroni, the former of whom collected the sixteen books of records, kept by successive kings and priests, into one volume, which on his death was supplemented by his son with some personal reminiscences and by him buried in the hill of Cumorah—he being divinely assured that the book would one day be discovered by God's chosen prophet.

A Historical Romance.

This is Smith's account of the book, but in reality it was written in 1812 as an historical romance by one Solomon Spalding, a crack-brained preacher; and the MS. falling into the hands of an unscrupulous compositor, Sidney Rigdon, was copied by him, and subsequently given to Joseph Smith. Armed with this book and with self-assumed divine authority, the latter soon began to attract followers.

On 6th of April, 1830, the first conference of the new sect, called by their neighbors Mormons, but by themselves subsequently Latter-Day Saints of Jesus Christ, was held at Fayette, Sencea

county, New York, and in the same year another revelation was received by Smith, proclaiming him "seer, translator, prophet, apostle of Jesus Christ, and elder of the church." Smith now began to baptize; but, his character, which was none of the best, being too well known in Fayette, he found it convenient to remove with his followers, now thirty in number, to Kirtland, Ohio, which was to be the seat of the New Jerusalem.

Tarred and Feathered

Here he had another revelation, directing the saints to consecrate all their property to God and to start a bank. This being done, and Smith appointed president of the bank, the country was soon flooded with worthless notes, which fact, added to other grievances, so enraged the neighboring Christian settlers, that on the night of 22nd of May, 1832, a number of them dragged Smith and Rigdon from their beds and tarred and feathered them. One year later, the church was fairly organized, with three presidents, Smith, Rigdon, and Frederick G. Williams, who were styled the first presidency, and entrusted with the keys of the last kingdom.

About this time the licentiousness of Smith might have led to the dissolution of the church but for the accession of Brigham Young, a Vermont painter and glazier, thirty years old, who turned up in Kirtland in 1832, and was immediately ordained elder. Young's indomitable will, persuasive eloquence, executive ability, shrewdness, and zeal, soon made their influence felt, and, when a further step was taken in 1835 towards the organization of a hierarchy by the institution of the quorum of the "twelve"

apostles," who were sent out as proselytizing missionaries among the "gentiles," Young was ordained one of the "twelve," and despatched to preach throughout the eastern States.

In 1836 a large temple was consecrated in Kirtland, and in the following year Orson Hyde and Heber C. Kimbali were sent off as missionaries to England, where, among the laboring masses in Manchester, Liverpool, Birmingham, Leeds, Glasgow, and the mining districts of South Wales they achieved a remarkable success. Early in 1838 the Kirtland bank failed, and Smith and Rigdon fled to Caldwell county, Missouri, where a large body of the saints, after having been driven successively from Jackson and Clay counties, had taken refuge and flourished.

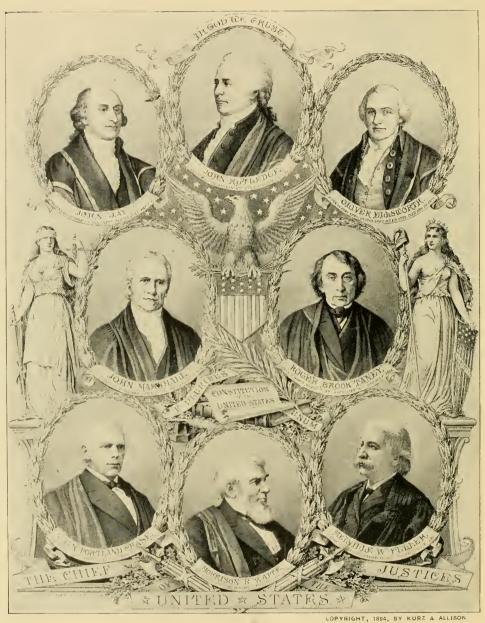
A Profligate Impostor.

Smith's troubles, however, continued to increase. His gross profligacy had repelled many of his leading supporters and bred internal dissensions, while from the outside the brethren were harassed and threatened by the steadily growing hostility of the native Missourians. To counteract the efforts of his enemies, a secret society was organized in Smith's favor in October, 1838, called the Danites, with the avowed purpose of supporting Smith at all hazards, of upholding the authority of his revelation and decrees as superior to the laws of the land, and of helping him to get possession, first of the State, then of the United States, and ultimately of the world.

To such a height did the inner dissensions and the conflicts with the "gentiles" grow that they assumed the proportions of a civil war, and necessitated



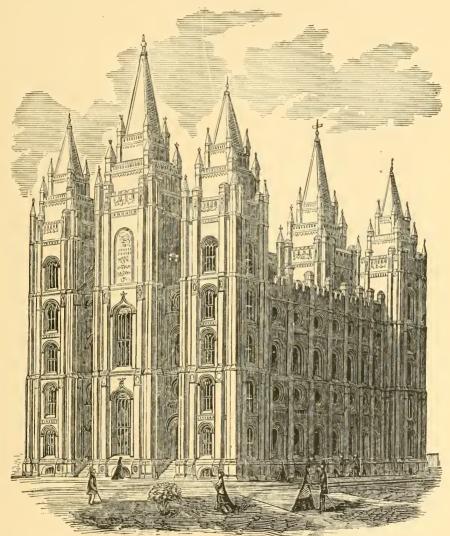
MAY 30TH, 1863, GENERAL HALLECK COMMANDING THE FEDERALS AND GENERAL BEAUREGARD THE CONFEDERATES



the calling out of the State militia. Defying the legal officers, Smith fortified the town and armed the saints, but finally had to succumb to superior numbers. Smith and Rigdon were arrested

shortly afterwards rejoined by Smith, who succeeded in escaping from prison, and, having obtained a charter, they founded the city of Nauvoo.

Such were the powers granted them



NEW MORMON TEMPLE IN SALT LAKE CITY.

and imprisoned on a charge of treason, murder and felony, and their followers to the number of 15,000 crossed over into Illinois and settled near Commerce, Hancock county. Here they were

by this charter as to render the city practically independent of the State Government, and to give Smith all but unlimited cvil power. He organized a military body called the Nauvoo legion, of which he constituted himself commander with the title of lieutenant-general, while he was also president of the church and mayor of the city. On April 6th, 1841, the foundations of the new temple were laid, and the city continued to grow rapidly in prosperity and size.

But Smith's vices were beginning to bear fruit. Some years previously he had prevailed on several women to cohabit with him, and in order to pacify his lawful wife and silence the objections of the saints he had a revelation on July 12th, 1843, expressly establishing and approving polygamy. The proclamation of the new doctrine excited widespread indignation, which found special expression in the pages of the *Expositor*, a newspaper published by an old friend of Smith, one Dr. Foster.

Shot Dead by a Mob.

Smith at once caused the *Expositor* printing-office to be razed and Foster expelled, on which the latter procured a warrant for the arrest of Smith, his brother Hyrum, and sixteen others. Smith resisted; the militia was called ont; the Mormons armed themselves; and a civil war seemed imminent, when the governor of the State persuaded Smith to surrender and stand his trial. Accordingly, on June 27, 1844, he and Hyrum were imprisoned in Carthage jail; but that same night a mob broke into the prison, dragged out Smith and his brother and shot them dead.

This shooting was the most fortunate thing that had ever happened to the Mormon cause, investing the murdered president with the halo of martyrdom, and effacing public recollection of his vices in the lustre of a glorious death. Of the confusion that followed Smith's

"taking off," Brigham Young profited by procuring his own election to the presidency by the council of the "twelve apostles,"—a position for which his splendid executive abilities well fitted him, as subsequent events abundantly proved.

The following year witnessed what appeared to be the culmination of their misfortunes. The legislature of Illinois repealed the charter of Nauvoo, and so critical did the situation become that the leaders resolved to emigrate immediately, and preparations were begun for a general exodus westward. Early in 1846 a large number of the body met at Council Bluffs, Iowa, and those who had stayed behind soon found cause to regret that they too had not left Nauvoo, as in the September of the same year that city was cannonaded, and the Mormons were driven out.

Shrewd Speculation.

The subsequent history of Nauvoo is interesting. The new citizens sent abroad highly colored circulars about the great water-power and natural site, and a great speculation followed, which ended in a collapse, and the city shrank to a little hamlet of perhaps 700 people. Then came the Icarians, French Communists, under the lead of M. Cabet. These proposed to fit up the temple for a social hall and school-room.

But at 2 A. M. of November 10, 1848, it was found to be on fire, and before daylight every particle of woodwork was destroyed. It was set on fire in the third story of the steeple, one hundred and forty feet from the ground. The dry pine burned like tinder. There was no mode of reaching the fire, and in twenty minutes the whole wooden in-

terior was a mass of flames. In two hours nothing remained but hot walls enclosing a bed of embers. Afterwards a man residing fourteen miles distant missionaries were sent out, and soon

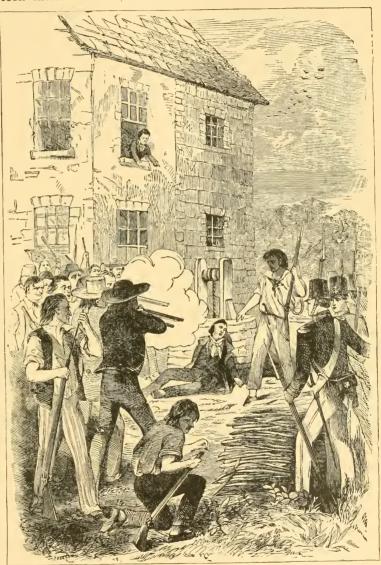
confessed that he set it on fire. He had suffered at the hands of the Mormous and swore no trace of them should cumber the soil of Illinois.

Meanwhile pioneers had been despatched to the Great Salt Lake valley, Utah, and, their report proving favorable, a large body of emigrants was marched with military discipline across the wilderness to the valley, where they immediately proceeded to found Salt Lake City, and where on July 24, 1847. they were joined by their chief, Brigham Young. In the May following the main body of the saints set out to rejoin their brethren, and in the autumm of that year

reached Salt Lake City. Large tracts of land were at once put under cultivation, a great city sprang up as by magic, and the untiring industry, energy, and zeal of the emigrants turned | zerland and France. Strangely enough,

a barren wilderness into a fertile and blooming garden.

An emigration fund was organized



JOE SMITH KILLED BY A MOB OF INDIGNANT CITIZENS.

settlers began to pour in from all quarters of the globe, particularly from Great Britain, Sweden and Norway, and in less numbers from Germany, Switand the fact deserves emphasis, Ireland has furnished few if any recruits to the cause of Mormonism. In March, 1849, a convention was held at Salt Lake City, and a State was organized under the name of Deseret, meaning "the land of the honey-bee."

A legislature was also elected, and a constitution framed, which was sent on to Washington. This Congress refused to recognize, and by way of compromise for declining to admit the proposed new State into the Union, President Fillmore in 1850 organized the country occupied by the Mormons into the Territory of Utah, with Brigham Young as governor. District judges were also appointed by the Federal Government; but in 1851, a few months after their appointment, they were forced to leave by the aggressive tactics of Young. Such bold defiance of the Federal Government could not be ignored; Brigham was suspended from the governorship, and Colonel Steptoe of the United States army appointed in his stead.

Daring Outrages.

The new governor, backed by a battalion of soldiers, arrived in Utah in August, 1854; but so strong was the opposition which he met with that he dared not assume office, and was forced to content himself with merely wintering in Salt Lake City, after which he withdrew his troops to California. Nor did the other civil officers appointed by the United States Government at the same time show any bolder front. February, 1856, a band of armed Mormons broke into the court-room of the United States district judge, and forced Judge Drummond to adjourn his court sine die. His surrender precipitated the flight of the other civil officers, and with the sole exception of the United States Indian agent they withdrew from Salt Lake City.

These facts led President Buchanan to appoint a new governor in the person of Alfred Cumming, the superintendent of Indian affairs on the upper Missouri, who, in 1857, went to Utah, accompanied by Judge Eckels of Indiana as chief justice, and by a force of 2500 soldiers. Enraged by the aggressive action, Brigham Young boldly called the saints to arms. In September the United States army reached Utah, but on the 5th and 6th of October, a band of mounted Mormons destroyed a number of its supply trains, and a few days later cut off 800 oxen from its rear and drove them into Salt Lake City.

Mountain Meadows Massacre.

The result was that the United States army, now commanded by Colonel A. S. Johnson, was compelled—it being now mid-November-to go into winter quarters at Black's Forks, near Fort Bridger. In the same year a party of Mormons and Indians, instigated and led by a Mormon bishop named John D. Lee, attacked a train of 150 non-Mormon emigrants at Mountain Meadows, near Utah, and massacred every soul. Governor Cumming at once declared the Territory in a state of rebellion; but in the spring of 1858, through the intervention of Thomas L. Kane, of Pennsylvania, armed with letters of authority from President Buchanan, the Mormons were induced to submit to the Federal authority, and accepted a free offer of pardon made to them by the United States Government as the condition of their submission.

Matters being thus settled, the Federal troops encamped on the western shore of Lake Utah, some forty miles from Salt Lake City, where they remained until withdrawn from the Territory in 1860. On the close of our Civil War a Federal Governor was again appointed, and, in 1871, polygamy was declared to be a criminal offence, and Brigham Young was arrested.

The year 1877 was otherwise signalized in Mormon history by the trial, conviction, and execution of John D. Lee, for the Mountain Valley massacre of 1857. Of late years the question of Mormonism has occupied public attention. In 1873 Mr. Frelinghuysen introduced a bill severely censuring polygamy, and declaring that the wives of polygamists could claim relief by action This action, however, on the part of for divorce. In 1874 the committee of



MASSACRE OF THE MORRISITES.

the United States Government was merely spasmodic, and the Mormons continued to practice polygamy, and to increase in wealth and numbers until August 29, 1877, when Brigham Young Jied, leaving a fortune of \$2,000,000 to seventeen wives and fifty-six childrun. He was succeeded in office by John Taylor, an Englishman, although the actual leadership fell to George Q. Cannon, "first counsellor" to the president, and one of the ablest men in the sect.

the House of Representatives reported a bill which reduced Utah to the position of a province, placing the control of affairs in the hands of Federal officials, and practically abolishing polygamy.

In the same year George Q. Cannon was elected a delegate from Utah, and though his election was contested it was confirmed by the House of Representatives. This decision, however, was accompanied by the passing of a resolution by a vote of 127 to 51, appointing a committee of investigation into Delegate Cannon's alleged polygamy—he having, it was asserted, four wives. Later in the same year the Utah Judiciary Bill, attacking the very foundation of Mormonism, passed the House in spite of the opposition of Cannon.

Other steps in the same direction have since been taken, and bills passed, having for their object the extirpation of polygamy. The secession, chiefly because of his opposition to the practice, of Brigham Young's son, a Christian preacher, and of a large body of other anti-polygamists who claim to be the true Latter-Day Saints, represents not an individual opinion, but the deep-rooted conviction of a great party. Already there are not wanting signs of approaching dissolution, of which perhaps the most significant is the conference of the "Re-organized Church of Jesus Christ of Latter-Day Saints," held on April 6, 1883, at Kirtland, Lake County, Ohio.

Origin of the New Sect.

This sect originated in 1851, seven years after the death of Joseph Smith, when several officers of the church met and claimed to have received a revelation from God, directing them to repudiate Brigham Young, as not being the divinely-appointed and legitimate successor of Joseph Smith, and as being the promulgator of such false doctrines as polygamy, Adam-God worship, and the right to shed the blood of apostates.

Nothing of special importance occurred, however, till 1860, when Joseph Smith, Jr., the eldest son of the founder of the faith, became identified with the Re-organized Church as its president. Since then the seceders have prosecuted

missionary work throughout the United States, Great Britain, Canada, Scandinavia, Switzerland, Australia, and the Society Islands, until their communicants are said to number over 27,000.

Bill to Suppress Polygamy.

On January 12, 1887, the House of Representatives passed without division a bill for the suppression of polygamy in the territory of Utah. Its chief provisions are: (1) Polygamy is declared to be a felony; (2) the chief financial corporations of the Mormons are dissolved, and the attorney-general is directed to wind them up by process of the courts; (3) polygamists are made ineligible to vote; (4) all voters in Utah are to be required to take an oath to obey the laws of the United States, and especially the laws against polygamy; (5) woman suffrage in Utah is abolished, and (6) lawful wives and husbands are made competent witnesses against persons accused of polygamy.

It was reported in September, 1890, that polygamy had been declared to be no longer a feature of Mormon teaching, and that it was the intention of the sect to submit to the ordinary laws binding on Americans.

In the first part of April, 1893, occurred the dedication of the great temple at Salt Lake City, built in forty years, at a cost stated to be \$5,000,000. In September, 1894, our government by proclamation granted pardon to polygamists, and it was reported that among the Mormons there was a general disposition to observe the laws of the United States enacted against their favorite institution. In January, 1897, ten colonies in New Mexico were reported to be prosperous.

CHAPTER IV.

War Between the United States and Mexico.

ARLY in the century, pioneers from the United States began to find their way to Texas, which was then a wild country, inhabited only by roving Indians and the garrisons of the few Spanish forts within its limits. One of these emigrants, Moses Austin, of Durham, Connecticut, conceived the plan of colonizing settlers from the United States.

For this purpose he obtained from the Spanish Government, in 1820, the grant of an extensive tract of land; but before he could put his plans in execution he died. His son, Stephen F. Austin, inherited the rights of his father under this grant, and went to Texas with a number of emigrants from this country, and explored that region for the purpose of locating his grant.

He selected as the most desirable site for his colony the country between the Brazos and Colorado rivers, and founded a city, which he named Austin, in honor of the originator of the colony, to whom Texas owes its existence as an American commonwealth. Having seen the settlers established in their new homes, Mr. Austin returned to the United States to collect other emigrants for his colony.

During his absence Mexico and the other Spanish provinces rose in revolt against Spain, and succeeded in establishing their independence. Texas, being regarded as a part of the Mexican territory, shared the fortunes of that country. Upon his return to Texas, Austin, in consideration of the altered state of affairs, went to the city of Mex-

ico, and obtained from the Mexican government a confirmation of the grant made to his father. Such a confirmation was necessary in order to enable him to give the settlers valid titles to the lands of his colony.

Mexico at first exercised but a nominal authority over the new settlements. and the colonists were allowed to live under their own laws, subject to the rules drawn up by Austin. In order to encourage settlements in Texas, the Mexican Congress, on the second of May, 1824, enacted the following law, declaring, "That Texas is to be annexed to the Mexican province of Cohahuila, until it is of sufficient importance to form a separate State, when it is to become an independent State of the Mexican republic, equal to the other States of which the same is composed, free, sovereign, and independent in whatever exclusively relates to its internal government and administration."

Flood of Immigration.

Encouraged by this decree, large numbers of Americans emigrated to Texas, and to these were added emigrants from all the countries of Europe. The population grew rapidly, new towns sprang up, and Austin's colony prospered in a marked degree, until 1830, when Bustamente having made himself, by violence and intrigue, president of the so-called Mexican republic, prohibited the emigration of foreigners to the Mexican territory, and issued a number of decrees very oppressive to

the people, and in violation of the constitution of 1824.

In order to enforce these measures in Texas, he occupied that province with his troops, and placed Texas under military rule. The Texans resented this interference with their rights, and finally compelled the Mexican troops to withdraw from the province. In 1832, another revolution in Mexico drove Bustamente from power, and placed Santa Anna at the head of affairs as president or dictator

Arrested and Imprisoned.

Texas took no part in the disturbances of Mexico, but after the accession of Santa Anna to power, formed a constitution, and applied for admission into the Mexican republic as a State, in accordance with the constitution of 1824, and the act of the Mexican Congress which we have quoted. Stephen F. Austin was sent to the city of Mexico to present the petition of Texas for this purpose. He was refused an answer to this petition for over a year, and at last wrote to the authorities of Texas, advising them to organize a State government without waiting for the action of the Mexican Congress.

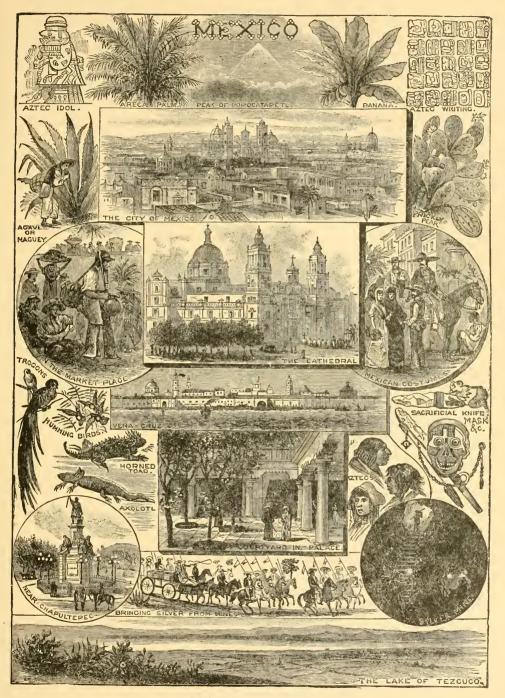
For this recommendation, which the Mexican government regarded as treasonable, Santa Anna caused the arrest of Austin, and kept him in prison for over a year. Texas now began to manifest the most determined opposition to the usurpation of Santa Anna, and measures were taken to maintain the rights of the province under the constitution of 1824. Troops were organized, and preparations made to resist the force which it was certain Mexico would send against them.

Santa Anna did not allow them to remain long in suspense, but at once dispatched a force under General Cos, to disarm the Texans. On the second of October, 1835, Cos attacked the town of Gonzalez, which was held by a Texan force, but was repulsed with heavy loss. A week later, on the ninth of October, the Texans captured the town of Goliad, and a little later gained possession of the mission house of the Alamo. Both places were garrisoned, and the Texan army, which was under the command of Austin, in the course of a few months succeeded in driving the Mexicans out of Texas.

State Government.

On the twelfth of November, 1835, a convention of the people of Texas met at the city of Austin, and organized a regular State government. Prominent among the members was General Sam Houston, a settler from the United States. Soon after the meeting of the convention General Austin resigned the command of the army, and was sent to the United States as the commissioner of that State to this government, and was succeeded as commander-in-chief by General Sam Houston. Henry Smith was elected governor of Texas by the people.

As soon as Santa Anna learned that his troops had been driven out of Texas, and that the Texans had set up a State government, he set out for that country with an army of seventy-five hundred men. He issued orders to his troops to shoot every prisoner taken, and intended to make the struggle a war of extermination. He arrived before the Alamo late in February, 1836. This fort was very strong, and was held by a force of one



SCENES IN MEXICO.

hundred and forty Texans under Colonel Travis. It was besieged by the whole Mexican army, and was subjected to a bombardment of eleven days.

Davy Crockett.

At last, on the sixth of March, the garrison being worn out with fatigue, the fort was carried by assault, and the whole garrison was put to the sword. Among the heroes who fell at the Texan Thermopylæ was the eccentric but chivalrous Colonel Davy Crockett, of Tennessee, who had generously come to aid the Texans in their struggle for liberty. The capture of the Alamo cost the Mexicans a loss of sixteen hundred men, or over eleven men for every one of its defenders.

On the 17th of March, 1836, the convention adopted a constitution for an independent republic, and formally proclaimed the independence of Texas. David G. Burnett was elected president of the republic.

The fort at Goliad was held by a force of three hundred and thirty Texans, under Colonel Fanning, a native of Georgia. On the twenty-seventh of March it was attacked by the Mexican army. The garrison maintained a gallant defence, but their resources being exhausted, and the Mexicans being reinforced during the night, Fanning decided to surrender his force, if he could obtain honorable terms. He proposed to Santa Anna to lay down his arms and surrender the post on condition that he and his men should be allowed and assisted to return to the United States. The proposition was accepted by Santa Anna, and the terms of the surrender were formally drawn up and were signed by each commander. As soon as the

surrender was made, however, and the arms of the Texans were delivered, Santa Anna, in base violation of his pledge, caused Fanning and the survivors of the garrison, to the number of three hundred men, to be put to death

The massacres of the Alamo and Goliad, and the steady advance of the Mexican army under Santa Anna caused a feeling of profound alarm throughout the new republic. The government was removed temporarily to Galveston, and General Houston retreated behind the San Jacinto. Santa Anna pursued the Texan forces, and at length came up with them on the banks of that stream. Houston had but seven hundred and fifty men with him, and these were imperfectly armed and without discipline.

Mexican Army Routed.

With this force he surprised the Mexican camp, on the 21st of April, and routed the Mexican army, inflicting upon it a loss of over six hundred killed, and taking more than eight hundred prisoners. Santa Anna himself was among the prisoners. Houston at once entered into negotiations with him for the withdrawal of the Mexican forces from Texas. This was done at once, and the independence of Texas was achieved. Santa Anna also recognized the independence of the new republic, but the Mexican Congress refused to confirm this act.

Houston was now the idol of the Texan people as the deliverer of their country from the hated Mexicans. At the next general election he was chosen President as the republic, and was inaugurated on the twenty-second of October, 1836. General Mirabeau B. Lamar was the third President of the republic

of Texas, and entered upon his office in 1838. He was succeeded in 1844 by Anson Jones, the fourth President.

The territory of the republic was sufficiently large to make five States the size of New York, and its climate and soil were among the most delightful and fertile in the world. It contained a population of about two hundred thousand, and was increasing rapidly in inhabitants and in prosperity.

Texas a Republic.

On the third of March, 1837, the independence of the republic of Texas was acknowledged by the United States, and in 1839 by France and England. Being young and feeble, and being settled almost entirely by Americans, the people of Texas at an early day came to the conclusion that their best interests required them to seek a union with the United States, and as early as August, 1837, a proposition was submitted to Mr. Van Buren looking to such a union. It was declined by him, but the question was taken up by the press and people of the Union, and was discussed with the greatest interest and activity.

The South was unanimously in favor of the annexation of Texas, as it was a region in which slave labor would be particularly profitable; and a strong party in the North opposed the annexation for the reason that it would inevitably extend the area of slavery. An additional argument against annexation was that it would involve a war with Mexico, which had never acknowledged the independence of Texas.

In April, 1844, Texas formally applied for admission into the United States, and a treaty for that purpose was negotiated with her by the government

of this country. It was rejected by the Senate.

In the fall of 1844 the Presidential election took place. The leading political question of the day was the annexation of Texas. It was advocated by the administration of President Tyler and by the Democratic party. This party also made the claim of the United States to Oregon one of the leading issues of the campaign. Its candidates were James K. Polk, of Tennessee, and George M. Dallas, of Pennsylvania. The Whig party supported Henry Clay, of Kentucky, and Theodore Frelinghuysen, of New Jersey, and opposed the annexation of Texas.

During this campaign, which was one of unusual excitement, the Anti-slavery party made its appearance for the first time as a distinct political organization, and nominated James G. Birney as its candidate for the Presidency.

Democrats in Power.

The result of the campaign was a decisive victory for the Democrats. This success was generally regarded as an emphatic expression of the popular will representing the Texas and Oregon questions. Mr. Birney did not receive a single electoral vote, and of the popular vote only sixty-four thousand six hundred and fifty-three ballots were cast for him.

When Congress met in December, 1844, the efforts for the annexation of Texas were renewed. A proposition was made to receive Texas into the Union by a joint resolution of Congress. A bill for this purpose passed the House of Representatives, but the Senate added an amendment appointing commissioners to negotiate with Mexico for

the annexation of Texas, which she still claimed as a part of her territory. The President was authorized by a clause in these resolutions to adopt either the House or the Senate plan of annexation, and on the second of March, 1845, the resolutions were adopted.

Senator Benton, of Missouri, the author of the Senate plan, was of the opinion that the matter would be left to Mr. Polk, the President-elect, to be conducted by him; and that gentleman had expressed his intention to carry out the Senate plan, as he hoped an amicable arrangement could be made with Mexico. Mr. Tyler, however, determined not to leave the annexation of Texas to his successor, and at once adopted the plan proposed in the House resolutions, and on the night of Sunday, March 3d, a messenger was despatched with all speed to Texas to lay the proposition before the authorities of that State. It was accepted by them, and on the fourth of July, 1845, Texas became one of the United States.

Large Territory Added.

The area thus added to the territory of the Union comprised two hundred and thirty-seven thousand five hundred and four square miles. It was provided by the act of admission that four additional States might be formed out of the territory of Texas, when the population should increase to an extent which should make such a step desirable. Those States lying north of the Mis-·souri Compromise line—36° 30' north latitude—were to be free States, those south of that line were to be free or slave-holding "as the people of each State asking admission may desire." To Texas was reserved the right to refuse to allow the division of her territory.

Mexico had never acknowledged the independence of Texas, and since the defeat at San Jacinto had repeatedly threatened to restore her authority over the Texans by force of arms. She warmly resented the annexation of Texas by the United States, and a few days after that event was completed, General Almonte, the Mexican minister at Washington, entered a formal protest against the course of the United States, demanded his passports, and left the country.

Redress for Outrages.

Some years before this, a number of American ships trading with Mexican ports had been seized and plundered by the Mexican authorities, who also confiscated the property of a number of American residents in that country. The sufferers by these outrages appealed for redress to the government of the United States, which had repeatedly tried to negotiate with Mexico for the collection of these claims, which amounted to six millions of dollars. Mexico made several promises of settlement, but failed to comply with them. In 1840, however, a new treaty was made between that country and the United States, and Mexico pledged herself to pay the American claims in twenty annual instalments of three hundred thousand dollars each. Three of these instalments had been paid at the time of the annexation of Texas; but Mexico now refused to make any further payment.

Mexico claimed that the limits of Texas properly ended at the Neuces river, while the Texans insisted that

their boundary was the Rio Grande. Thus the region between these two rivers became a debatable land, claimed by both parties, and a source of great and immediate danger. It was evident that Mexico was about to occupy this region with her troops, and the legislature of Texas, alarmed by the threatening attitude of that country, called upon the United States government to protect its territory. The President at once sent General Zachary Taylor with a force of fifteen hundred regular troops, called the "army of occupation," to "take position in the country between the Neuces and the Rio Grande, and to repel any invasion of the Texan territory."

In Battle Array.

General Taylor accordingly took position at Corpus Christi, at the mouth of the Neuces, in September, 1845, and remained there until the spring of 1846. At the same time a squadon of war vessels under Commodore Connor was despatched to the Gulf to co-operate with General Taylor. Both of these officers "were ordered to commit no act of hostility against Mexico unless she declared war, or was herself the aggressor by striking the first blow."

At the commencement of the dispute between the two countries, Herrera was President of Mexico. Although diplomatic communications had ceased between the United States and Mexico, he was anxious to settle the quarrel by negotiation, but at the Presidential election held about this time Herrera was defeated, and Paredes, who was bitterly hostile to the United States, was chosen President of the Mexican republic. Paredes openly avowed his determina-

tion to drive the Americans beyond the Neuces.

In February, 1846, General Taylor was ordered by President Polk to advance from the Neuces to a point on the Rio Grande, opposite the Mexican town of Matamoras, and establish there a fortified post, in order to check the Mexican forces which were assembling there in large numbers for the purpose of invading Taxas. Taylor at once set out, and leaving the greater part of his stores at Point Isabel, on the Gulf, advanced to the Rio Grande, and built a fort and established a camp opposite and within cannon shot of Matamoras. General Ampudia, commanding the Mexican forces at Matamoras, immediately notified General Taylor that this was an act of war upon Mexican soil, and demanded that he should "break up his camp and retire beyond the Neuces" within twenty-four hours.

First Blood Shed.

Taylor replied that he was acting in accordance with the orders of his government, which was alone responsible for his conduct, and that he should maintain the position he had chosen. He pushed forward the work on his fortifications with energy, and kept a close watch upon the Mexicans. Neither commander was willing to take the responsibility of beginning the war, and Ampudia, notwithstanding his threat, remained inactive. His course did not satify his government, and he was removed and General Arista appointed in his place. Arista at once began hostilities by interposing detachments of his army between Taylor's force and his depot of supplies at Point Isabel. On the twenty-sixth of April Taylor sent

a party of sixty dragoons under Captain Thornton to reconnoitre the Mexican lines. The dragoons were surprised with a loss of sixteen killed. The remainder were made prisoners, and Thornton alone escaped. This was the first blood shed in the war with Mexico, the beginning of the struggle.

A day or two later, being informed by Captain Walker, who, with his Texan Rangers, was guarding the line of communication with Point Isabel, that the Mexicans were threatening the latter place in heavy force, General Taylor left Major Brown with three hundred men to hold the fort, and marched to Point Isabel to relieve that place. He agreed with Major Brown that if the fort should be attacked or hard pressed, the latter should notify him of his danger by firing heaving signal guns at certain intervals. He reached Point Isabel, twenty miles distant, on the second of May without meeting any opposition on the march.

Signal Guns Fired.

General Arista, attributing Taylor's withdrawal to fear, determined to capture the fortification on the opposite side of the river. On the third of May he opened fire upon it from a heavy battery at Matamoras, and sent a large force across the Rio Grande, which took position in the rear of the fort and intrenched themselves there. In the face of this double attack the little garrious defended themselves bravely, but at length Major Brown fell mortally wounded. The command devolved upon Captain Hawkins, who now felt himself justified in warning Taylor of his danger, and began to fire the signal guns agreed upon,

Taylor was joined at Point Isabel by a small detachment, and his force was increased to twenty-three hundred men. He listened auxiously for the booming of the signal guns from the fort on the Rio Grande, and at length they were heard. He knew that the need of assistance must be great, as the little band in the fort had held out so long without calling for help, and he at once set out to join them. He left Point Isabel on the seventh of May, taking with him a heavy supply train. The steady firing of the signal guns from Fort Brown (for so the work was afterwards named in honor of its gallant commander) urged the army to its greatest exertions.

Battle of Palo Alto.

On the 8th of May the Mexican army, six thousand strong, was discovered holding a strong position in front of a chaparral, near the small stream called the Palo Alto, intending to dispute the advance of the Americans. Taylor promptly made his dispositions to attack them. His troops were ordered to drink from the little stream and to fill their canteens. The train was closed up, and the line was formed with Major Ringgold's light battery on the right, Duncan's battery on the left, and a battery of eighteen-pounders in the center.

The artillery was thrown well in front of the infantry, and the order was given to advance. The Mexicans at once opened fire with their batteries, but the distance was too great to accomplish anything. The American batteries did not reply until they had gotten within easy range, when they opened a fire the accuracy and rapidity of which astonished the Mexicans.

Their lines were broken and they fell back, and the Americans advanced steadily through the chaparral, which had been set on fire by the discharge of cannon, until a new position within close range was reached. Paying no attention to the Mexican artillery, the American guns directed their fire upon the enemy's infantry and cavalry, and broke them again and again. The battle lasted five hours and ceased at nightfall. It was fought entirely by the artillery of the two armies, and was won by the superior handling and precision of the American guns.

Flying Artillery.

The loss of the Mexicans was four hundred killed and wounded; that of the Americans nine killed and forty-four wounded. Early in the battle Major Ringgold was mortally wounded and died a little later. He was regarded as one of the most gifted officers of the army, and to him was chiefly due the precision and rapidity of movement acquired by the "flying artillery" of the American army, which were so successfully tested during this war.

The American army encamped on the battle-field, and the next morning, May 9th, as the Mexicans had retreated, leaving their dead unburied, resumed its advance. In the afternoon the Mexicans were discovered occupying a much stronger position than they had held at Palo Alto. Their line was formed behind a ravine, called Resaca de la Palma, or the Dry River of Palms. Their flanks were protected by the thick chaparral, and their artillery was thrown forward beyond the ravine and protected by an intrenchment, and swept the road by which the Americans must advance.

During the night fresh troops had joined the Mexican army, and had increased their force to seven thousand men.

Taylor formed his line with the artillery in the center. The artillery was ordered to advance along the road commanded by the Mexican battery, and the infantry were directed to move as rapidly as possible through the chaparral, and drive out the Mexican sharpshooters. The infantry executed this order in handsome style, but the chaparral was so dense that each man was obliged to act for himself as he forced his way through it. The Mexican battery was handled with great skill and coolness, and held the center in check until some time after the infantry had forced their way close to the edge of the ravine.

Charge of the Gallant May.

At this juncture Captain May was ordered to charge the Mexican guns, and started down the road at a trot. As he reached the position of the American artillery, Lieutenant Ridgely suggested that May should halt and allow him to draw the Mexican fire. Ridgely opened a rapid fire on the Mexican guns, which was answered immediately. At the same moment May dashed at the Mexican battery with his dragoons, and reached it before the cannoneers could reload their pieces. They were sabred at their guns, and the battery was carried. Captain May himself made a prisoner of General LaVega, as the latter was in the act of discharging one of the guns.

Leaving the battery to the American infantry which now hurried forward to secure it, the dragoons charged the Mexican centre and broke it. The whole

American line then advanced rapidly; the Mexicans gave way, and were soon flying in utter confusion towards the Rio Grande, which they crossed in such haste that many of them were drowned in the attempt to reach the Mexican shore.

General Arista, the Mexican commander, fled alone from the field, leaving all his private and official papers behind him. The Americans lost one hundred and twenty-two men killed and wounded; the Mexicans twelve hundred. All the Mexican artillery, two thousand stand of arms, and six hundred mules were captured by the Americans.

Americans Advance.

General Taylor advanced from the battlefield to Fort Brown, the garrison of which had heard the distant roar of the battle, and had seen the flight of the Mexican across the Rio Grande.

General Taylor was delayed at Matamoras for three months by the weakness of his force; but, as soon as reinforcements reached him, he prepared to advance into the interior. His first movement was directed against the city of Monterey, the capital of the State of New Leon, where the Mexicans had collected an army. His army numbered about nine thousand men of all arms, and of these a little over twenty-three hundred men were detached for garrisons, leaving an active force of six thousand six hundred and seventy men. On the twentieth of August General Worth's division marched from Matamoras, and a fortnight later General Taylor set out from the Rio Grande with the main army. On the ninth of September the American forces encamped within three miles of Monterey.

Every means of defence had been exhausted by the Mexicans. Forty-two heavy cannon were mounted on the city walls, the streets were barricaded, and the flat roofs and stone walls of the houses were arranged tor infantry. Each house was a separate fortress. A strongly fortified building of heavy stone, called the Bishop's palace, stood on the side of a hill without the city walls, and on the opposite side of the city were redoubts held by infantry and artillery.

On the morning of the twenty-first of September the American artillery opened fire on Monterey, and the infantry advanced to carry the Mexican works. The brigade of General Quitman carried a strong work in the lower part of the town, and at the same time General Butler, with a part of his division, forced his way into the town on the right.

At the Citadel.

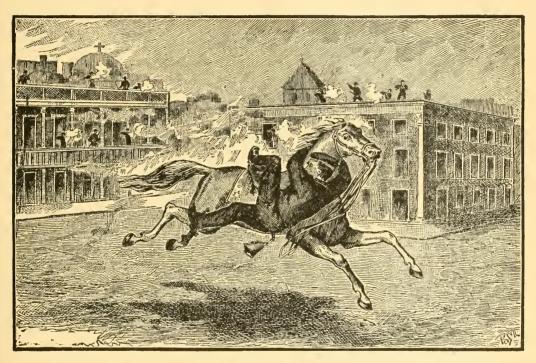
During the night of the twenty-first the Mexicans evacuated the lower part of the city, but kept their hold upon the citadel and the upper town, from which they maintained a vigorous fire upon the American positions. At daybreak, on the twenty-second, Worth's division, advancing in the midst of a fog and rain, carried the crest commanding the Bishop's palace, and by noon had captured the palace itself. The guns of the captured works were now directed upon the enemy in the city below.

The enemy had fortified the city so thoroughly that the Americans were not only forced to carry the various barricades in succession, but were compelled to break through the walls of the fortified houses, and advance from house

to house in this way. One or two field pieces were drawn up to the flat roofs, and the Mexicans were driven from point to point during the twentysecond and twenty-third, until they were confined to the citaded and plaza. On the night of the twenty-third General Ampudia opened negotiations, and on the morning of the twenty-fourth surrendered the town and garrison to General thousand Mexicans under Santa Anna.

fierce charge than in volunteering to make a dangerous ride under fire, in search of ammunition.

The next important engagement occurred at Buena Vista, a village of Mexico, seven miles south of Saltillo. where on February 22d and 23d, 1847, five thousand United States troops under General Taylor defeated twenty



LIEUT. ULYSSES S. GRANT GOING FOR AMMUNITION AT MONTEREY.

Taylor. The Americans lost four hundred and eighty-eight men, killed and wounded, in the storming of Monterey. The Mexican loss was much greater.

General Grant, then an unknown young lieutenant, was in the battle of Monterey, and distinguished himself on account of "gallant and meritorious services." Several times during the battle he demonstrated his superior judgment and courage, not more in the

The American loss in this battle was two hundred and sixty-seven killed and four hundred and fifty-six wounded. That of the Mexicans was over two thousand killed and wounded, including many officers of high rank. Taylor followed the Mexican army on the twenty-fourth, as far as Agua Nueva, and collecting their wounded, removed them to Saltillo, where they were attended by the American surgeons.

The victory of Buena Vista was decisive of the war. It saved the valley of the Rio Grande from invasion by a victorious Mexican army, and enabled the expedition of General Scott against Vera Cruz to proceed without delay to the accomplishment of its objects. It also greatly disheartened the Mexican people, and during the remainder of the year Taylor's army had nothing to do but to hold the country it occupied.

Scott's Expedition.

The expedition under General Scott sailed from New Orleans late in November, 1846, and rendezvoused at the island of Lobos, about one hundred and twenty-five miles north of Vera Cruz. The plan of operations for this army was very simple—to capture Vera Cruz and march to the city of Mexico by the most direct route. At length everything being in readiness, the expedition sailed from Lobos Island, and on the morning of the ninth of March, 1847, the army, thirteen thousand strong, landed without opposition at a point selected by General Scott and Commodore Connor a few days before. The city and vicinity had been thoroughly reconnoitered, and the troops were at once marched to the positions assigned them by the commander-in-chief.

Vera Cruz is the principal seaport of Mexico, and contained at the time of the siege about fifteen thousand inhabitants. It was strongly fortified on the land side, and towards the Gulf was defended by the Castle of San Juan de Ulloa, the strongest fortress in America, with the exception of Quebec.

On the tenth of March the investment of the city was begun by General Worth, and the American lines were

definitely established around the city for a distance of six miles. During the day, and for several days thereafter, bodies of Mexicans attempted to harass the besiegers, and a steady fire was maintained upon them by the guns of the castle and the city as they worked at their batteries. The American works being completed, and their guns in position, General Scott summoned the city of Vera Cruz to surrender, stipulating that no batteries should be placed in the city to attack the castle unless the city should be fired upon by that work.

The demand was refused by General Morales, who commanded both the city and the castle, and at 4 o'clock on the afternoon of the twenty-second of March, the American batteries opened fire upon the town. The bombardment was continued for five days, and the fleet joined in the attack upon the castle. The city suffered terribly; a number of the inhabitants were killed, and many buildings were set on fire by the shells.

A Decisive Victory.

On the twenty-seventh the city and castle surrendered, and were promptly occupied by the Americans. Over five thousand prisoners and five hundred pieces of artillery fell into the hands of the victors. The garrison were required to march out, lay down their arms, and were then dismissed upon their parole. The inhabitants were protected in their civil and religious rights. The surrender was completed on the morning of the twenty-ninth.

Having secured the city and the castle, General Scott placed a strong garrison in each, and appointed General Worth governor of Vera Cruz. He then prepared to march upon the city of Mexico, and on the eighth of April the advance division, under General Twiggs, set out from Vera Cruz towards Jalapa. Deducting the force left to garrison Vera Cruz, Scott's whole army amounted to but eighty-five hundred men.

Makes a Stand at Cerro Gordo.

Santa Anna had not found the consequences to himself of the battle of Buena Vista as bad as he had expected. He had succeeded in pursuading his countrymen that he had not been defeated in that battle, but had simply retreated for want of provisions, and they had agreed to give him another trial. He had pledged himself to prevent the advance of the Americans to the capital, in the event of the fall of Vera Cruz, and with the aid of those of his countrymen who were willing to support him had quelled an insurrection at the capital, and had strengthened his power to a greater degree than ever. With a force of twelve thousand men he had taken position at Cerro Gordo, a mountain pass at the eastern edge of the Cordilleras, to hold the American army in check, and had fortified his position with great skill and care.

General Twiggs halted before the Mexican position to await the arrival of General Scott, who soon joined him with the main army. The Mexican lines were carefully reconnoitered, and on the eighteenth of April General Scott, avoiding a direct attack, turned the enemy's left, seized the heights commanding their position, and drove them from their works with a loss of three thousand prisoners and forty-three pieces

of artillery. Santa Anna mounted a mule, taken from his carriage, and fled, leaving the carriage and his private papers in the hands of the Americans. Besides their prisoners, the Mexicans lost over one thousand men in killed and wounded. Scott's loss was four hundred and thirty-one killed and wounded.

The passes on the direct road to the city had been well fortified and garrisoned by the Mexicans, but the country upon the flanks had been left unprotected, because Santa Anna deemed it utterly impossible for any troops to pass over it, and turn his position. El Peñon the most formidable of these defences, was reconnoitered by the engineers, who reported that it would cost at least three thousand lives to carry it. Scott thereupon determined to turn El Peñon, instead of attacking it. city and its defences were carefully reconnoitered, and it was discovered that the works on the south and west were weaker than those at any other points.

Americans Push Forward.

General Scott now moved to the left, passed El Peñon on the south, and by the aid of a corps of skillful engineers moved his army across ravines and chasms which the Mexican commander had pronounced impassable, and had left unguarded. General Twiggs led the advance, and halted and encamped at Chalco, on the lake of the same name. Worth followed, and passing Twiggs, encamped at the town of San Augustin, eight miles from the capital.

As soon as Santa Anna found that the Americans had turned El Peñon, and had advanced to the south side of the city, he left that fortress and took position in the strong fort of San Antonio, which lay directly in front of Worth's new position. Northwest of San Antonio, and four miles from the city, lay the little village of Churubusco, which had been strongly fortified by the Mexicans. A little to the west of San Augustin was the fortified camp of Contreras, with a garrison of about six thousand men.

In the rear, between the camp and the city, was a reserve force of twelve thousand men. The whole number of Mexicans manning these defences was about thirty-five thousand, with at least one hundred pieces of artillery of various sizes.

Desperate Struggle.

General Scott lost no time in moving against the enemy's works. General Persifer F. Smith was ordered to attack the entrenched camp at Contreras, while Shields and Pierce should move between the Camp and Santa Anna at San Antonio, and prevent him from going to the assistance of the force at Contreras.

At three o'clock on the morning of August 20th, in the midst of a cold rain, Smith began his march, his men holding on to each other, to avoid being separated in the darkness. He made his attack at sunrise, and in fifteen minutes had possession of the camp. He took three thousand prisoners and thirty-three pieces of cannon.

The camp at Contreras having fallen, General Scott attacked the fortified village of Churubusco an hour or two later, and carried it after a desperate struggle of several hours. General Worth's division stormed and carried the strong fort of San Antonio, and General Twiggs captured another im-

portant work. The Mexicans outnumbered their assailants three to one, and fought bravely. Their efforts were in vain, however, and late in the afternoon they were driven from their defences, and pursued by the American cavalry to the gates of the city.

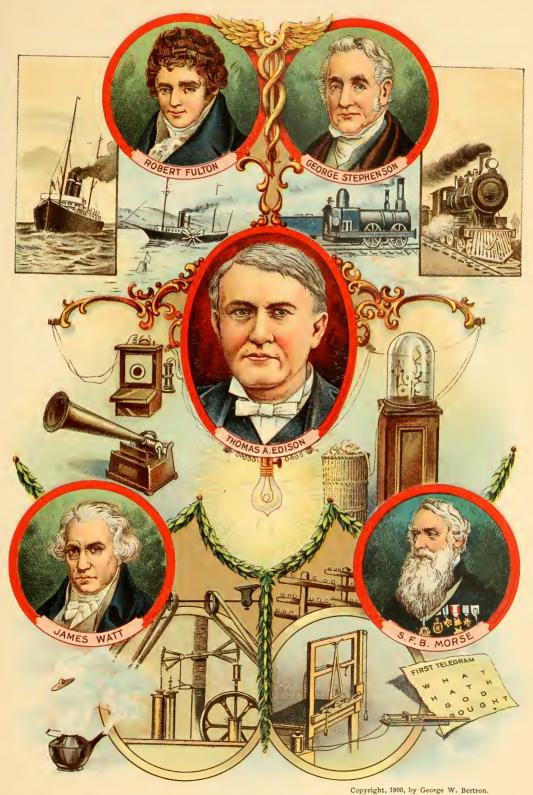
How the Victories Were Won.

These two victories had been won over a force of thirty thousand Mexicans by less than ten thousand Americans, and a loss of four thousand killed and wounded and three thousand prisoners had been inflicted upon the Mexican army. The American loss was eleven hundred men.

Santa Anna retreated within the city, and on the twenty-first of August the American army advanced to within three miles of the city of Mexico. On the same day Santa Anna sent a flag of truce to General Scott, asking for a suspension of hostilities, in order to arrange the terms of peace. The request was granted, and Mr. Trist was despatched to the city, and began negotiations with the Mexican commissioners.

After protracted delays, designed to gain time, the Mexican commissioners declined the American conditions, and proposed others which they knew would not be accepted. Thoroughly disgusted, Mr. Trist returned to the American camp, and brought with him the intelligence that Santa Anna had violated the armistice by using the time accorded him by it in strengthening his defences. Indignant at such treachery, General Scott at once resumed his advance upon the city.

the strong fort of San Antonio, and The Mexican capital was still de-General Twiggs captured another im- fended by two powerful works. One of



FAMOUS INVENTORS OF THE CENTURY



these was Molino del Rey, "The King's | wounded—nearly one-fourth the whole Mill," a foundry, where it was said the | American force engaged.

church bells were being cast into cannon; the other was the strong castle of Chapultepec.

General Scott resolved to make his first attack upon Molino del Rey, which was held by fourteen thousand Mexicans. It was stormed and carried on the 8th September, after a severe contest by Worth's division, four thousand strong. This was regarded as the hardestwon victory of The the war. Mexicans were nearly four times as numerous as the Americans, and their position was one of very great strength. The Americans fought principally with their rifles and muskets. their artillery being of but little use to them, owing to the nature



GENERAL SCOTT ENTERING THE CITY OF MEXICO.

of their position. Their loss was seven | The castle of Chapultepec stood on a hundred and eighty-seven killed and | steep and lofty hill, and could not be

turned. If won at all, it must be by a direct assault. On the twelfth of September the American artillery opened fire upon it, and reduced it almost to ruins. On the morning of the thirteenth a determined assault was made by the Americans, and the castle was carried after a sharp struggle.

Santa Anna's Retreat.

During the night of the thirteenth Santa Anna, with the remains of his army, retreated from the city, leaving the authorities to make the best terms they could with the conquerors. The city officials presented themselves before General Scott before daybreak, and proposed terms of capitulation. The general replied that the city was already in his power, and that he would enter it on his own terms. The next day, September 14, 1847, the American army entered the city of Mexico, occupied the grand square, and hoisted the stars and stripes over the government buildings. Santa Anna retreated with four or five thousand men from the capital to the vicinity of Puebla, which was besieged by a Mexican force. The city contained eighteen hundred sick Americans, and was held by a garrison of five hundred men under Colonel Childs. This little force held out bravely until the arrival of a brigade from Vera Cruz, under General Lane, on its way to reinforce General Scott. Lane drove off Santa Anna's army, and relieved Puebla on the eighth of October. Ten days later Santa Anna was reported to be

collecting another force at Alixo. Lane set out immediately for that place, reached it by a forced march, and dispersed the Mexicans beyond all hope of reunion.

Immediately after the capture of the city of Mexico Santa Anna resigned the presidency of the republic in favor of Senor Peña y Peña, president of the Supreme Court of Justice, but retained his position as commander-in-chief of the army. The fall of the city was followed by the inauguration of a new government, one of the first acts of which was to dismiss Santa Anna from the command of the army. He at once left the country, and fled to the West Indies.

Return of Peace.

On the Fourth of July, 1848, Presi-Polk issued a proclamation announcing the return of peace. By the terms of the treaty the Rio Crande was accepted by Mexico as the western boundary of the United States and of Texas, and that republic ceded to the United States the provinces of New Mexico and Upper California. For this immense territory the government of the United States agreed to pay to Mexico the sum of fifteen millions of dollars, and to assume the debts due by Mexico to citizens of the United States, amounting to the sum of three and a half millions of dollars. The treaty having been ratified, the American forces were promptly withdrawn from Mexico, and the two countries resumed friendly relations.

CHAPTER V.

The Great Civil War.

HE agitation upon the question of slavery began about the year 1830, when William Lloyd Garrison, of Boston, commenced the publication of a paper entitled "The Liberator." The great object of this publication was to secure the immediate abolition of slavery throughout the United States. It should be said that there were advocates of this measure at the beginning of the century, including especially the Quakers.

As the anti-slavery sentiment grew in the North the people of the South more and more became alarmed, and prepared to defend the institution which they considered essential to their own well-being. The result was that the two great sections of our country became in a large measure estranged, and the statesmen of both North and South, fearing that the disruption of the Union would finally follow, exerted themselves to the utmost to prevent such a calamity.

In 1821 Missouri was admitted into the Union, but the present limits of the State were not established till 1836. Its admission was preceded by a long and bitter political controversy between the representatives of the North and South, the former resisting its entrance as a slave State. The discussion resulted in the famous "Missouri Compromise," a measure strongly advocated by Henry Clay, under which compact it was agreed that slavery should be forever excluded from all that part of Louisiana north of 36° 30' latitude, except Missouri. It was not foreseen at the time that this

measure would have an important bearing upon the territory of Nebraska, including what is now the State of Kansas, but such was the case.

In 1850 California, to which the discovery of gold had attracted a rush of immigrants, was admitted as a non-slave State. To pacify the South, the Fugitive Slave Law was passed, which directed the Federal authorities to return slaves who had escaped to the North, and also required citizens wherever the slaves were found to aid in their capture. The North took great umbrage at the enactment of this law, and the anti-slavery sentiment grew rapidly.

Struggle in Kansas.

In 1854, in defiance of the Missouri Compromise, the principle of "squatter sovereignty" was applied to the two great territories lying north of 36 degrees and as far as 30 degrees—Kansas and Nebraska. The spirit of the North was fully aroused, and anti-slavery men poured into Kansas with the intention of making it a free State, as Congress had already decided that the question of slavery should be left to the inhabitants to settle by themselves. The State government was organized on a non-slave basis, though it was not admitted as a State until 1861.

This struggle led to the formation of a new party in the North opposed to slavery, although such opposition had already shaped the policy to a large extent of the Whig party. The new party adopted as its name that of Jefferson's old party—Republican—and grew with marvellous rapidity. In 1856 a Presidential election was held; the Democratic candidate, Buchanan, was elected by a majority of the electoral vote, but Fremont, the Republican candidate, had a large popular vote.

About this time an incident occurred that greatly inflamed the anti-slavery sentiment of the North. In his opinion on what was known as the Dred-Scott Case, Chief Justice Taney stated, among other things, that a slave, or the descendant of a slave, could not be a citizen of the United States, and the Missouri Compromise was unconstitutional.

Party Divided.

In 1860, the Democratic party was split in two sections, the southern or ultra-slavery Democrats and the northern or conservative Democrats. The southerners demanded recognition by the party of the duty of Congress to protect slavery; the northern Democrats could not possibly agree to this. In the face of a divided party, the Republicans elected their candidate, Abraham Lincoln, President. The North was now much stronger in population and wealth and growing stronger every day. If the South remained in the Union it would soon be at the mercy of the North. The extreme southern States determined to secede, hoping no doubt that the northwest and California would either join them or remain neutral. But the newer States had been largely settled by foreigners, to whom the United States had been a star of hope for many years, until frugality enabled them to emigrate thither. They had no state pride, but were intensely loyal to the country which was their adopted home.

The northwest, California, and after a struggle, Missouri, Kentucky and Maryland, cast in their lot with the North and East. About eight or nine millions in the South stood against twenty or twenty-two millions in the North, with the resources of wealth and increased production on the side of the latter.

Mr. Lincoln was maugurated March 4, 1861. In his address he declared that he had neither the right nor the desire to interfere with slavery where it already existed; that no State could lawfully go out of the Union; and that he should maintain the laws and constitution of the United States to the best of his ability. The new administration was beset with difficulties on every side, and the condition of affairs seemed almost desperate. Many of those who for years had guided the "ship of state," and who understood its workings, were now foremost in advocating secession.

Appalling State of Affairs.

Mr. Lincoln's officers were new to the business of the Federal government. The treasury, by defalcation, was nearly bankrupt. Few troops were within call; and the army had been almost broken up by the surrender of detached forces in the Confederate States, and the capture of munitions of war. The vessels of the navy were sailing or at anchor in distant waters, and numerous officers of both the army and the navy were resigning their commissions on the ground that they owed allegiance first to the States from which they came.

Seven States had already revolted, and others were ready to swell the number upon the first attempt to enforce the Federal authority. The public offi-

ces were largely occupied by persons in sympathy with the secession movement, and every step taken by the new government was known at once to the leaders of the Confederacy, and to crown all, Mr. Lincoln was beset by a vast horde of office-seekers eager to take advantage of the change of administration.

The President waited a month and then notified Governor Pickens, of South Carolina, that he should send supplies to Fort Sumter at all hazards. This announcement precipitated an attack upon the fort. Major Anderson was first summoned to surrender, but he refused. At daybreak on the morning of April 12, 1861, the Confederacy began its open conflict with the United States. All the batteries around the fort opened fire upon it; the fort replied, and the bombardment continued for thirty-six hours without loss of life on either side. The ammunition of the fort was then exhausted, and the works inside were on fire.

The Old Flag Lowered.

Thereupon the United States flag, for the first time in its history, was lowered to insurgent citizens, and the garrison capitulated. This event aroused the North as if from a trance. Until now, the mass of the people had refused to believe in real danger; but the first shock of arms thoroughly convinced them that the South was ready to fight, and could not be curbed without war. It did more than this. In the Northern States party distinctions were for a time swept aside; there was but one party worth the name—the party for the Union. The Southern States were no longer "erring sisters" to be coaxed by concessions. The whole North called loudly for the full exercise of the Federal power to compel the South to obedience at the point of the bayonet.

The day after the evacuation of Fort Sumter, President Lincoln called for 75,000 volunteers for three months, April 15. The response was so promptly made that the first Massachusetts troops began their march on the same day, and in a surprisingly short time the quota was full; nay, it could have been filled three or four times over, and the many who were refused felt a keen disappointment at not being allowed to bear arms in defense of the Union.

State Sovereignty.

the South, also, the effect of the first conflict was correspondingly great. To the ignorant masses it did not seem possible that any other power could be superior to that of their own State; while the more intelligent classes had, from their childhood, imbibed the doctrine that State sovereignty was the foundation of civil liberty. Hence all felt bound to follow the lead of their State; and when the President of the new Confederacy issued his call for men it was answered, as in the North, by overflowing numbers.

Those southern States which had wavered were now compelled to make their choice. When Mr. Lincoln called for troops the Governors of Arkansas, Virginia, North Carolina and Tennessee refused to obey. North Carolina and Arkansas then seceded, and joined the Confederacy. In Tennessee and Virginia "military leagues" were formed with the Confederate States, by which Confederate troops were allowed to take possession of their territory, and by their aid the question of secession

was submitted to popular vote. Thus the secession of these two States was accomplished in part, but not wholly.

The people of the Alleghany mountains were loyal to the Union; in eastern Tennessee they aided the Federals as much as possible; the opposition to secession was so strong in the western counties of Virginia that the inhabitants refused to obey the convention which passed the ordinance; they chose a legislature which claimed to be the true government, and at last formed a new State which was admitted to the Union in 1863, under the name of West Virginia. Even thus curtailed, Virginia was a most important accession to the Confederacy; it increased its military strength greatly, and at once became the chief battle-ground of the war.

The Theatre of Conflict.

The Confederate government was moved from Montgomery to Richmond; and since Washington was separated only by the Potomac from the Confederacy, it was clear that the great contest would be fought in the country which lay between the two capitals. Moreover, Virginia was the richest and greatest of the slave States, and furnished the Southern army with its ablest leaders, many of whom—such as Lee, Jackson, Johnson, and Ewell—were opposed to secession, but thought it right to shape their own course by that of their State.

There was a strong anti-union element in Missouri, Kentucky, Maryland, and Delaware, and the most momentous results—involving, doubtless, the success of the Union cause—were involved in the action they would now take. Aside from Virginia, Missouri was the most powerful slave State, and her geographical position, with that of Kentucky and Maryland, was of incalcuable military importance. Had these three States united with the Confederacy it might have won the prize for which it was contending—independence.

Missouri, however, did not break away, though the issue was for some time doubtful with her. Delaware cast her lot with the Union. In Maryland and Kentucky efforts were made to maintain neutrality, but they were soon induced to declare in favor of the Federal government. Kentucky, however, had some of her sons in the Southern tanks, among whom was John C. Breckinridge, a former Vice-President of the United States, who became an officer in the Confederate army.

The Federal government was in no want of men, but the action of Secretary Floyd had almost stripped it of arms to equip them. Agents were sent abroad to purchase guns, private manufactories were worked day and night to produce them, and in a short time the administration was able to call more men into the field.

Not a Warlike People.

The Northern people were unmilitary in their habits and thoughts. They had a militia, but it was poorly organized. The Mexican war had drawn few volunteers from this section, and the United States army was very small and imperfectly equipped. The early action of the Confederates also had weakened it. There was, however, a greater population to draw from than at the South. There was also a wider range of industry to supply the necessary funds to carry on the war.

South Carolina had, on the 14th of 1 January, 1861, declared in her legislature that any attempt to reinforce Fort Sumter would be regarded as a declaration of war. April 11th Governor Pickens, in a note to Major Robert Anderson, commanding Fort Sumter, ordered him to deliver up the fort. Anderson answered that he had no power to comply, and, as already stated, refused.

orders to have vessels in readiness to send supplies to the beleaguered Fort Sumter. in Charleston harbor. Supplies were sent by the Star of the West, but did not arrive in season, the vessel having retreated from the harbor after being fired upon. These were, in reality, the first

hostile shots from the South on the National flag, though the attack on Fort Sumter is regarded as the beginning of the war.

The attack was conducted by General G. T. Beauregard, favorably known in connection with the Mexican War, now appointed to the chief command of the The assault was Confederate forces. opened at four o'clock of April 12th, when was fired the first gun of the terrible Civil War which ensued. The fort was surrendered on the afternoon

of the 13th, after Anderson and his brave band of seventy men had fought for thirty-six hours, exposed to death by shot, shell and conflagration.

Major Anderson reported that he "marched out on the 14th with colors flying and drums beating, bringing away company and private property, and saluting our flag with fifty guns." The men carried away the flag they The navy-yards of Brooklyn received had defended. The same day and hour,



FORT SUMTER IN THE BEGINNING OF THE WAR.

four years afterwards, that memorable flag was restored, and again waved over the shattered remains of Fort Sumter.

The first blood of the war was shed in the streets of Baltimore. Massachusetts and Pennsylvania troops on their way to Washington were attacked by a Baltimore mob, April 19, 1861, and some of the soldiers killed. The populace, which sympathized with the South, declared that no Northern troops should pass through the city. The railroad was blocked up, bridges were burned,

telegraph wires were cut, and all direct communication with the North was stopped, until the President sent a military force from Annapolis to occupy Baltimore and keep the road open. In a short time the active hostility of the people was overcome, and the national capital made secure.

By July 4th the Confederates had pushed their forces as far as Manassas Junction, about thirty miles from Washington. Their line of defence was already marked out, and its length has been estimated at eleven thousand miles, including the Atlantic and gulf coasts. It comprised the left bank of the Potomac from Fortress Monroe nearly to Washington; from thence it extended to Harper's · Ferry, on through the mountains of western Virginia and the southern part of Kentucky, crossing the Mississippi a short distance below Cairo. From this point its direction was through southern Missouri to the eastern border of Kansas; then southwest, through the Indian territory, and along the northern boundary of Texas to the Rio Grande.

Reliance on Cotton.

The area contained within this interior line and the sea-coast was about 800,000 square miles, with a population of over 9,000,000. It comprised, also, the territory devoted to the raising of cotton, an article necessary to the manufacturing interests of the world. It was upon this production that the South relied largely for aid; all the munitions of war could be procured in exchange for it; and she believed it would be a powerful factor in preventing the blockading of her ports.

In consideration of this fact, and also

that the Confederate line of sea-coast was over three thousand miles in length, with but one port of refuge for a blockading fleet about the middle of the line, it scarcely seemed possible that a blockade could be maintained with any marked degree of success. Nevertheless, the President issued a proclamation, April 19, 1861, declaring a blockade of all the southern parts, and the Federal government proceeded to purchase and arm a large number of merchant vessels. But it could not at once bring together a navy powerful enough to keep vessels from entering or leaving the blockaded ports. The South not only sent out vessels laden with cotton to the West Indies and to Europe, but received in return military supplies of all kinds.

To Destroy Commerce.

Upon the appearance of Mr. Lincoln's blockade proclamation, Mr. Davis issued one also, granting letters of marque and reprisal to private vessels, against the commerce of the United States. The governments of Great Britain and France now issued proclamations of neutrality, thus making the contest between the North and the South a civil war, according to subsequent decisions of the Supreme Court.

At the meeting of Congress, July 4, 1861, the Republicans had a majority in both branches, the free States and border States only being represented. The House voted to devote its time solely to the business connected with the war. It supported the President's proclamation closing the Southern ports against commerce. Bills were passed to define and punish conspiracy against the United States, and to confiscate all

private property, including slaves, employed against the Federal government; to authorize a loan; to call out 500,000 volunteers, and to appropriate money for the army and navy.

During this session occurred the first battle of Bull Run, July 21, 1861. General Scott had been appointed commander-in-chief of the Union forces. The first military movements were in the mountains of western Virginia, and the success of the Union army there led many people to suppose that in a short time the rebellious States would be compelled to obedience. Mr. Seward, who was Secretary of State, was especially cheerful, and promised that the war should be over in ninety days. The newspapers and people generally urged an immediate movement upon Richmond.

First Great Battle.

Very few had any knowledge of the difficulties before them, and General Scott, pressed by public opinion, gave the order to advance. This resulted in the first serious battle of the war. The Union forces were defeated, and retreated in a panic upon Washington. Both armies were yet so new in military training that the Confederates gained nothing from their success.

This disaster opened the eyes of the North, and the country settled down into a more serious temper. Congress was, more than ever, stimulated to increased energy, and pledged itself to vote any amount of money and any number of men necessary to maintain the Union. Propositions to consider negotiations for peace were constantly offered by extreme Democrats, and as constantly rejected by large majorities,

on the ground that negotiation with armed rebellion was unconstitutional.

General Scott, having resigned the command of the Northern armies on account of his age and infirmity, was succeeded by General George B. Mc-Clellan, whose successful campaign in western Virginia had given him a high reputation throughout the army. He had a genius for organization, and possessed the unbounded confidence of the people. He immediately set about forming the first great army of the war—the Army of the Potomac—at Alexandria, in preparation for a second advance.

Impatience of the North.

But the advance was delayed much too long to suit the impatience of the people and the administration; and as the winter 1861–62 passed away without any forward movement, the expressions of dissatisfaction became louder and more general. The Confederacy also spent the summer and autumn of 1861 in organizing its northern Army of Virginia, under General Beauregard.

In the autumn of 1861 a portion of General Stone's command on the Upper Potomac was sent on a reconnoissance into Virginia, under Colonel Baker, and, being attacked by the Confederate general, Evans, at Ball's Bluff, was disastrously defeated. Colonel Baker was among the killed. Although Missouri had not seceded, a strong party, with which the governor was acting, wished to carry it over to the Confederacy. A Confederate camp near St. Louis was broken up by Captain Lyon, of the regulars, and the St. Louis arsenal was saved to the government. The State was afterward invaded by Confederates

from Arkansas, who were defeated by Lyon (now a general) at Booneville, June 17th, and by Sigel at Carthage, July 5th.

A large force of Confederates under McCullough and Price attacked Lyon at Wilson's Creek, August 10th. Lyon was killed, and his command fell back toward the center of the State. Price with 20,000 men then attacked Lexington, which was garrisoned by 2,000 Federal troops under Colonel Mulligan. After an heroic defense of three days the little garrison was compelled to surrender, September 20th, after their water supply had been cut off for forty-eight hours. General Fremont was now appointed to the command of the western department. He drove Price into the southwest corner of the State, and was about to give battle when he was superseded by General Hunter, November 2d. Hunter retreated to St. Louis, with Price in pursuit; but in a fortnight Hunter was replaced by Halleck, and Price was driven into Arkansas.

Families Divided.

Kentucky, like Missouri, was distracted by dissensions among its own people, and by armies on both sides. General Polk of the Confederate army occupied Hickman and Columbus, towns on the Mississippi. There was also a Confederate force at Belmont, Missouri, opposite Columbus. Ulysses S. Grant, recently appointed a brigadiergeneral of volunteers, now first came into notice. He drove the Confederates out of Belmont November 7th, but was unable to hold the town because it was commanded by the fortifications of Columbus.

From the beginning of the war, the

Federal government was embarrassed by the question of fugitive slaves. Congress had passed the act confiscating slaves employed in service hostile to the United States. While General Fremont was in command of the forces of the West, he had issued a proclamation declaring the slaves of Missouri Confederates free men, but this was countermanded by President Lincoln, who did not wish to estrange those slave-holders, especially in Kentucky, who were still loyal to the Union.

How Slaves Were Treated.

In Virginia, General Benjamin F. Butler had declared that slaves were "contraband of war," and, therefore, liable to confiscation by military law. But as yet the disposition of the North was to subdue the South without interfering with slavery; and some Union commanders restored to their masters the slaves who had escaped into the Federal lines.

Formidable expeditions were fitted out to recapture Southern harbors. A combined land and naval force, under General Butler and Commodore Stringham reduced and occupied two forts at Hatteras Inlet, North Carolina, at the entrance to Albemarle and Pamlico Sounds, August 29th, and Port Royal harbor, near Beaufort, South Carolina, was secured through the reduction of Forts Walker and Beauregard by the fleet under Commodore Dupont, November 7, and a land force under General Thomas W. Sherman. These successes were of great value to the Federal government. They not only closed important Southern ports, but they furnished convenient stations for the blockading fleet.

The "paper blockade," as it had been called, was soon made a very effective one along the whole length of the Southern coast from the Potomac to the Rio Grande, an achievement which by many had been deemed impossible. Still, in spite of the watchfulness of the Federal navy, several Confederate men-of-way and privateers sailed out of port, and did much damage to merchant ships. The practice of "running the blockade" became a very profitable business; and notwithstanding the danger of capture, which was the case in many instances, the profits on a single successful voyage were so great that adventurers found they could afford to take the risk

Seeking Recognition Abroad.

As has been stated, the South depended largely upon assistance from abroad, and the southern leaders still clung to the hope that they could prevail upon Great Britain and France to recognize the independence of the Confederacy. Two commissioners, therefore, Messrs. Mason and Slidell, were sent by the Confederate government to London and Paris. They ran the blockade, made their way to Havana, and then embarked for England in the British mail-steamer Trent.

Some distance out, the Trent was overhauled by an American man-of-war under Captain Wilkes, the two commissioners were taken off, November, 1861, and carried to Boston harbor, where they were imprisoned in Fort Warren. This action, which was illegal and unauthorized, caused great excitement in England, and came very near causing a collision between the two countries. Lord Palmerston made a peremptory

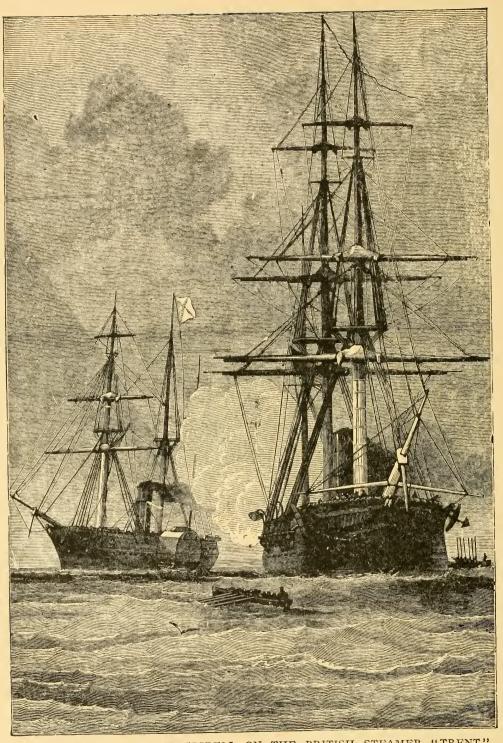
demand for the surrender of the prisoners. The American government had already disavowed the act of Captain Wilkes, which, though it was justified by the British claim of the "right of search," was contrary to American principles. The Confederate envoys were therefore promptly released and sent to England.

Just before this occurrence President Lincoln requested two confidential agents to visit France and England in order to help the Federal cause and avert the danger of foreign war by their influence with the governments and with persons of distinction. The persons selected for this delicate and important trust were Archbishop Hughes, of New York, and Mr. Thurlow Weed. They sailed in November, and rendered very valuable service, Mr. Weed in England, and the Archbishop in France.

War of Vast Magnitude.

At the beginning of 1862 the war had assumed vast proportions. The number of men under arms on both sides was nearly a million. The Confederates held possession of the Mississippi river from the Gulf of Mexico to the southern boundary of Kentucky, and occupied a chain of strong positions extending thence through Tennessee and Kentucky to the southwestern corner of Virginia. Between the Alleghanies and the Blue Ridge was the fertile Shenandoah Valley, often disputed by both armies.

At the east the Confederates were posted in great force between the Potomac and the Rappahannock. Now that Delaware, Maryland, Kentucky and Missouri had been saved to the Union, it was certain that the battle would be



ARREST OF MASON AND SLIDELL ON THE BRITISH STEAMER "TRENT" 76

fought out in the territory to the south of them. The plan of the Federal authorities was to open the Mississippi and penetrate the Confederate line at the west, while at the same time McClellan attacked Richmond, and a land and naval force continued the process of capturing the southern ports on the Atlantic coast.

Simon Cameron, who had been Secretary of War, resigned January 20, 1862, and was succeeded by Edwin M. Stanton. All the Federal armies were to move simultaneously on the 22d of February, Washington's birthday, but this order could not be strictly carried out.

Grant in the West.

The first advance was made in the West. General Grant had entered Kentucky from Illinois, and succeeded in securing the mouths of the Tennessee and Cumberland rivers, two streams which were to serve as military highways by which the Federal armies were to penetrate into the heart of the Confederacy. The chief Confederate positions between the Mississippi river and the Alleghany mountains were Fort Henry on the Tennessee, Fort Donelson on the Cumberland (both in Tennessee), and Bowling Green and Mill Spring in Southern Kentucky. This line of defence was in command of General Sydney Johnston, with headquarters at Bowling Green. Here he was confronted by General Buell's army, the middle one of the three great Federal armies, which came to be known as the Army of the Cumberland.

Forts Henry and Donelson formed the centre of the Confederate line, and was confronted by Grant, whose troops afterwards formed the army of the Tennes-

see. In January, 1862, General Thomas with the left of Buell's force thoroughly defeated the Confederate right at Mill Spring. General Grant, aided by the river fleet under Commodore Foote, now assailed the centre. Fort Henry was first attacked and reduced by the gunboats before Grant had time to invest it. The combined forces then assaulted Fort Donelson, which, after a brave resistance, was captured February 16th with 15,000 prisoners.

The centre of the Confederate line was now pierced, and Johnston and Polk were compelled to retreat for fear of being cut off. Columbus, Bowling Green and Nashville were evacuated, and the whole of Kentucky and most of Tennessee were in the hands of the Federals. General Buell occupied Nashville; a strong Union party showed itself in Tennessee, and Senator Andrew Johnson was appointed Military Governor of the State.

A Terrible Battle.

The Confederates formed their second line of defense along the railroad from Memphis to Chattanooga, and began massing their forces at Corinth. The armies of Grant and Buell were to unite and attack the enemy in his new position. Grant moved up the Tennessee river and halted at Pittsburg Landing, or Shiloh, about twenty miles from Corinth, there to await the arrival of Buell. Here Johnston made a brilliant attack upon him with the intention of crushing him before Buell could come up.

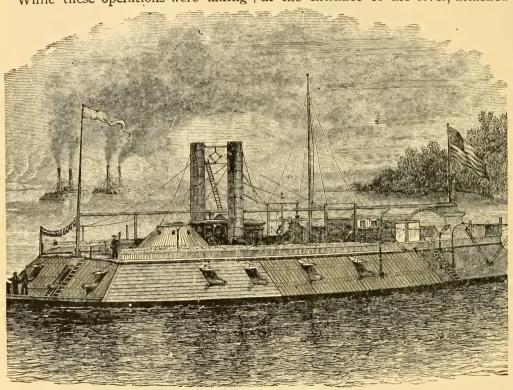
A terrible battle was fought April 6th and 7th, in which the Confederate leader, who was one of the slain, came very near effecting his purpose. But

the Federal forces, though driven back at nearly every point, stubbornly resisted, and at the close of the first day Buell's advance guard came upon the scene. The next morning Grant, now reinforced, assumed the offensive; and after a fight of several hours, the Confederates were driven back to Corinth.

While these operations were taking

captured for several weeks afterwards on account of the slow advances of General Halleck, who had assumed command of the Federal forces at that point.

Meanwhile a fleet under Farragut and Porter, with a land force under Butler. had been sent to attack New Orleans. Farragut ran past the batteries and forts at the entrance of the river, attacked



IRON-CLAD GUNBOAT.

place in Tennessee, Commodore Foote with his gunboats entered the Mississippi with a small army under Pope, and captured Island Number Ten on the day of Grant's victory at Shiloh. Two months later Fort Pillow was abandoned by the Confederates, and Memphis at once fell into the hands of the Union army. The victory at Shiloh decided the fate of Corinth, an important railroad center, though it was not of victories for the Federal armies.

and destroyed the ironclads which met him, and captured New Orleans, which was occupied by the army under Butler. Farragut with a part of his fleet then pushed up the river, clearing away all obstacles, passed the batteries at Vicksburg, and met the Federal gunboats under Captain Davis above. Thus the war in the West had been, so far, marked by an almost unbroken series

At the northern boundary of the State of Mississippi the Union advance stopped for a time; but all was held that had been won. To gain control of the great river, it was necessary to take Vicksburg, with its outpost, Port Hudson, which, between them, commanded the entrance to the Red river, and thus kept open the communications of the eastern part of the Confederacy with its States of Texas, Louisiana and Arkansas.

Moving on Vicksburg.

To capture Vicksburg would cut off these States, and greatly cripple the fighting power of the Confederate government. The occupation of Chattanooga was also necessary to the success of the Union arms. It would open the way into Georgia, and prevent the Confederates from recovering any of the lost ground in Tennessee.

While the South had met with defeat in the West, it was encouraged by a success in Hampton Roads. Confederates had taken the "Merrimac," a former frigate of the United States navy, and transformed her into an iron-clad ram, with sloping sides and huge iron beak. On March 8, 1862, this strange-looking craft entered Hampton Roads and attacked the Feberal fleet lying there, which consisted of five wooden ships of war. The Merrimac destroyed the Cumberland, and also compelled the frigate Congress to At night she went back surrender. to Norfolk.

The next morning she was seen coming out again to complete the work of destruction. Suddenly the Monitor, a turreted iron-clad vessel, advanced to meet her, and after an obstinate engagement of several hours the Merrimac

was compelled to retire. These encounters were remarkable as the first engagements between iron-clads and wooden vessels, and between two iron-clads. The result caused a revolution in the navies of the world; the day of wooden war-vessels was seen to be over, and all the great powers began at once the construction of iron and steel vessels.

The military operations in Virginia during the year 1862 offered a strong contrast to the course of events in the West. This was owing partly, no doubt, to the superior ability of the Confederate commanders, as compared with their antagonists, partly, because on the Union side military affairs were too much intermingled with politics.

Jackson Repulsed.

While General McClellan was organizing a splendid army of 200,000 men near Washington, General Banks was ordered to occupy the Shenandoah valley. He began his advance in February, and having, as he supposed, cleared the valley of the enemy, set out with his own corps proper to join McClellan. As soon as he was gone, General Jackson, popularly known as "Stonewall Jackson," hastened to attack the division of Shields which remained in the valley. After a desperate battle at Kearnstown, March 23d, Jackson was compelled to retire. Banks returned to the valley, and Shields was sent to join McDowell at Fredericksburg.

General Fremont now approached from the West, in order to unite with Banks near Stanton. To prevent this Jackson formed the plan of attacking the Federal forces in detail. He nearly succeeded in getting into the rear of the main body with a much larger army

than Banks could muster. By a hurried retreat Banks reached and crossed the Potomac, with the Confederate cavalry in close pursuit. Shields hastened back to the valley, but his advance guard was defeated at Port Republic, June 8th, by Jackson, who, the same day, had checked Fremont at Cross Keys.

Having thus saved the valley to the Confederates, and obliged the government at Washington to detain for the defense of the capital a large body of troops which McClellan greatly needed for other duty, Jackson joined the Confederate army in front of Richmond.

McClellan's Advance.

General McClellan concentrated the Army of the Potomac between Washington and Manassas, as if intending to advance against Richmond by that route. He then withdrew his forces and went by water to Fortress Monroe in order to advance up the peninsula between the James and York rivers. Here he was held in check for a month by Johnston at Yorktown, and when McClellan was ready to take the place, the Confederates retreated toward Richmond. The Union forces followed, and both armies concentrated around Richmond.

McClellan gained the battles of Williamsburg, May 5th, and West Point, May 9th, and advanced within seven miles of the city. A panic broke out in the Southern capital, and the Confederate Congress adjourned in haste. It was just at this time that Stonewall Jackson, by his brilliant and daring exploits in the Shenandoah Valley, obliged the Federal government to keep in front of Washington a corps

under McDowell which was about to co-operate with McClellan by way of Fredericksburg.

The movements of McClellan involved the separation of the two wings of his army by the little river Chickahominy, which by a sudden rise was changed into a wide stream. The Confederates under Johnston at once attacked the Union left wing at Fair Oaks and Seven Pines. A fierce battle ensued, lasting two days; the result, however, was a Union victory. Johnston was wounded, and was succeeded by Robert E. Lee, who retained command of the army of Virginia during the rest of the war.

Plan Had to be Changed.

The absence of McDowell, who was expected to support McClellan's right, compelled a change in the whole plan of operations. Although Lee had been repulsed in an attack on the Federal lines at Mechanicsville, June 26th, he fell upon them again at Gaines Mill the day following, in overwhelming force, and drove them across the Chickahominy with severe loss. Jackson had now reinforced Lee, and McClellan was cut off from his base of supplies on York river. Unable to re-unite his wings and regain his base, the Union general decided upon the difficult manœuvre of establishing another base on the James river.

While effecting this change, the Union troops were hard pressed by Lee and Jackson, who, during the period from June 26th to July 1st, attacked them at Golding's Farm, Savage's Station, White Oak Swamp, Glendale, etc., and finally at Malvern Hill, where the Confederates were signally repulsed,

This was the last of a series of engagements known as the "Seven Days' Battles," in the course of which McClellan lost over 15,000 men. Lee suffered almost as much. The Union army had now reached the James river, and established itself in a position from which it could not be driven.

Designs on Washington.

Lee and Jackson then turned their attention toward Washington, which was defended by an army under General Pope's forces stretched along Pope. the Rappahannock and Rapidan to the Shenandoah Valley. General Banks held a position at the western end of the line, and was attacked by Jackson at Cedar Mountain. Lee followed close behind, and the two generals forced Banks back and then attacked Pope. McClellan received orders from Washington to join Pope, and a portion of his forces came up in time to take part in the second battle of Bull Run, August 29th. Pope's army was put to rout, Washington was threatened and the whole country was wild with excitement.

Lee now led his victorious army across the upper Potomac and entered Maryland. McClellan, gathering up the remnants of the two defeated armies, followed and confronted the Confederates at Antietam creek. A desperate struggle took place, September 17th.

It left each army exhausted, but the victory remained with the Union forces. The Confederates recrossed the Potomac and retired up the Shenandoah Valley.

The administration was dissatisfied with McClellan's course, and his command was given to General Burnside. The new commander at once moved toward Richmond, proposing to cross the Rappahannock at Fredericksburg. Here he found Lee posted upon the hills behind the town. Burnside crossed the river, and, forming his army in three divisions, attempted to storm the heights, December 13th. It was a day of terrible slaughter for the Federal troops. They were repulsed with the loss of twelve thousand men, the army was demoralized, and retreated to the north side of the river. Burnside was then superseded by General Hooker.

The North Discouraged.

The close of 1862 thus found the opposing armies in nearly the same positions as at the beginning of the war. At the North gloom and discouragement prevailed. At the State elections held in the autumn there was a majority against the administration in several of the Northern States, and the result of the campaigns on the Potomac gave great strength to the peace party, which believed that the attempt to subjugate the South ought to be abandonod.

CHAPTER VI.

End of the Great Civil War.

at Corinth was divided, Buell's marching eastward to seize Chattanooga, while Grant's remained at Corinth till it should be ready to start for Vicksburg. The campaign was so badly managed by Halleck that the Confederates, under Bragg, seized Chattanooga before Buell's arrival. They were thus enabled to press him so vigorously that he had to be largely reinforced from Grant's army.

Thus weakened. Grant was unable to advance for several months. During the summer of 1862 the Confederates made a great effort to repair the disasters they had suffered on the Tennessee and Mississippi rivers by an invasion of An army under Kirby Kentucky. Smith moved from Knoxville, East Tennessee, while another, under Bragg, marched from Chattanooga. The Confederate general, Smith, defeated General Nelson near Richmond, Kentucky, August 30th, and advanced toward the Ohio, threatening Cincinnati. General Lew Wallace, however, compelled him to fall back to Frankfort.

Bragg in the meantime hastened toward the city of Louisville. Buell, leaving Nashville, by forced marches reached the place one day ahead of Bragg. Being reinforced, he slowly pushed the Confederates back. Bragg formed a junction with Smith at Frankfort, and four days later a severe but indecisive battle was fought at Perryville, October 8th. The Confederates then retreated through Cumberland Gap.

During Bragg's campaign, the Con-

82

federate army in Mississippi under General Van Dorn made an attempt to turn Grant's left wing at Corinth, and thus force him back down the Tennessee River. This wing was commanded by General Rosecrans, who defeated Price at Inka, a few miles from Corinth, September 19th. On October 4th Van Dorn and Price together attacked Corinth, but were repulsed by Rosecrans with a loss of five thousand men, and pursued forty miles.

Hard Fighting in Tennessee.

Soon after this Rosecrans superseded Buell in command of the army of the Cumberland. Bragg had advanced to Murfreesborough, in Central Tennessee. There Rosecrans attacked him, December 31st, and a bloody battle was fought, in which 40,000 men were engaged on each side, and each lost more than 10,000. This engagement is generally known as the battle of Stone River. It was indecisive. On January 2, 1863, Bragg renewed the attack with great vigor, but this time he was signally defeated, and compelled to retire to Chattanooga.

While these battles were being fought Grant had begun his first movement against the strong and important post of Vicksburg, on the Mississippi. His plan was to march from Jackson, Mississippi, while Sherman, with his 40,000 men, and Porter, with a fleet of gunboats, descended the river from Memphis. The movements were made according to this arrangement, but Van Dorn's cavalry succeeded in getting in

Grant's rear and cutting off his supplies. This compelled Grant to abandon his march to Jackson. Sherman and Porter attacked the bluffs north of Vicksburg, but were repulsed with heavy loss on December 29th. Hearing of Grant's misfortune, they returned to Memphis.

After Hatteras Inlet to Pamlico Sound had been captured, it was next resolved to attack the Confederate position on Roanoke Island, which commands the passage between Pamlico and Albemarle Sounds. A land and naval expedition under General Burnside and Commodore Goldsborough took the forts and batteries of the island February 8, 1862, captured a Confederate flotilla, occupied Newberne, North Carolina, March 14th, and reduced Fort Macon, at Beaufort, April 25th.

Capture of Fort Pulaski.

Expeditions from Port Royal under Commodore Dupont took possession of Darien and Brunswick, Georgia, and of Jacksonville, Fernandina, and St. Augustine, Florida. April 11, 1862, General Gilmore captured Fort Pulaski, on the Savannah River. Thus the port of Savannah was completely closed, although no effort was made for some time to occupy the city.

During the movement of the armies in 1862, Congress had not been idle. It was chiefly occupied in measures connected with the prosecution of the war. Its most far-reaching action was in the provision for a uniform national currency. At the beginning of the war the government had borrowed large sums of money to defray expenses, and it continued to borrow as new demands arose. The result was similar to that

which occurred in the Revolutionary War. The promises to pay became less valuable as compared with gold, which was the standard of value throughout the civilized world.

The banks in the several States could no longer obtain gold without paying a high price for it: and at the end of 1861 they suspended specie payments. order to provide a currency for the people, a bill was passed by Congress early in 1863 authorizing the issue of notes by the United States Treasury. These notes received the popular name of "greenbacks," from the color of the paper on which they were printed; and to insure their success they were declared by Congress to be "legal tender," February 25, 1862. Early in 1863 Congress passed an act establishing national banks. Heretofore the States had incorporated all banks, and the bills of each bank were seldom current except in its own neighborhood. By the national banking system, the banks were to be organized, and the United States bonds deposited in Washington.

Special Legislation.

The banks were then permitted to issue notes up to ninety per cent. of the value of the bonds deposited, and the notes, being thus secured, became current in every part of the country. A homestead bill was passed, which assigned public lands to actual settlers at reduced rates. Congress also prohibited slavery in the District of Columbia; slaves of insurgents were ordered to be confiscated; and the army was forbidden to surrender fugitive slaves to their masters. It provided for the construction of a Pacific railroad and telegraph, and began a further development of the

system of granting public lands to railway corporations.

The abolition sentiment had spread very rapidly in the North, and it had now become supported by the military needs of the hour. At the beginning of the conflict the Union leaders and people generally had not favored any interference with slavery, but circumstances had proved their position to be President Lincoln, who untenable. watched anxiously every movement, was convinced that the time had come when the Federal government could no longer attempt to carry on the war successfully and spare the system of slavery.

Vexed Question of Slavery.

He therefore announced, September, 1862, that unless the revolting States should return to their allegiance by January I, 1863, he should declare the slaves in these States to be free. It was a formal notice given out of respect to law; no one seriously expected that it would be regarded by the Confederate States. And it was not. They only grew more firm in consequence of the action taken. On the 1st day of January, 1863, in accordance with his notice, the President issued his celebrated Proclamation of Emancipation.

This act caused much discussion. Mr. Lincoln could not, legally, issue such a declaration, for the Constitution gave him no authority to abolish slavery. But he acted on the principle of military necessity, advocated by John Quincy Adams in his speech of April 14, 1842, in which he said: "Whether the war be civil, servile, or foreign, I lay this down as the law of nations: I say that the military authority takes for the time

the place of all municipal institutions, slavery among the rest. Under that state of things, so far from its being true that the States where slavery exists have the exclusive management of the subject, not only the President of the United States, but the commander of the army has power to order the universal emancipation of slaves."

The events of the preceding summer had shown that the war was far from being at an end. The cutting off of the cotton supply had been a general calamity, and the distress produced in consequence created a fear lest England and France should unite in an attempt to put an end to the contest. But the proclamation changed all this. By it the struggle was converted into a crusade against slavery, and in this light foreign intervention was now simply impossible, owing to Great Britain's attitude towards slavery.

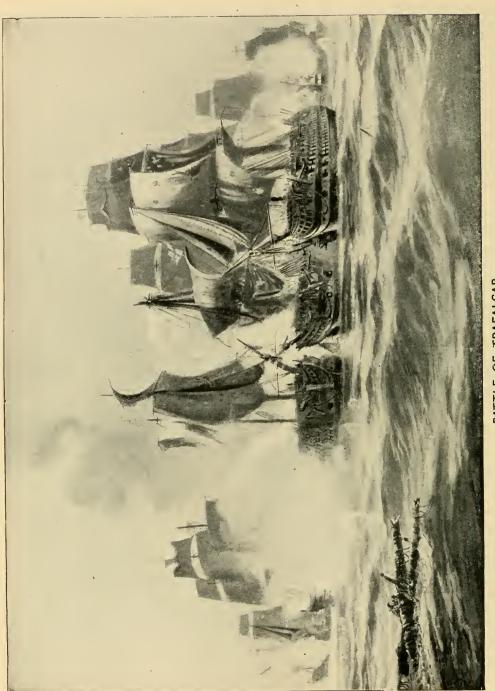
Negro Regiments.

Moreover, should the Federal government be successful, the question of slavery would practically be settled forever, for its abolition would be certain when the Union was re-established. One of the first results of the act was the formation of regiments of negro soldiers. An attack made by one of these regiments, under Colonel Shaw, upon Fort Wagner, in Charleston harbor, though unsuccessful, showed so much bravery that the prejudice against negro soldiers disappeared, and great numbers were enrolled.

General Hooker spent three months in reorganizing and strengthening the Army of the Potomac. At the end of April, 1863, he began his march toward Richmond with 120,000 men. Sending



NAPOLEON AND THE QUEEN OF PRUSSIA AT TILSIT AT THIS PLACE, IN EASTERN PRUSSIA, THE TREATY OF PEACE BETWEEN FRANCE AND RUSSIA, APT ALSO BETWEEN FRANCE AND PRUSSIA WAS SIG ED, JULY 7TH 1807



BATTLE OF TRAFALGAR

GREAT NAVAL VICTORY OBTAINED BY THE BRITISH FLEET UNDER LORD NELSON OVER THE COMBINED FLEETS OF FRANCE AND SPAIN, BEFORM GOING INTO ACTION NELSON SIGNALLED TO EACH OF HIS SHIPS, "ENGLAND EXPECTS EVERY MAN TO DO HIS DUTY " THE GALLANT COMMANDER WAS KILLED IN THE BATTLE

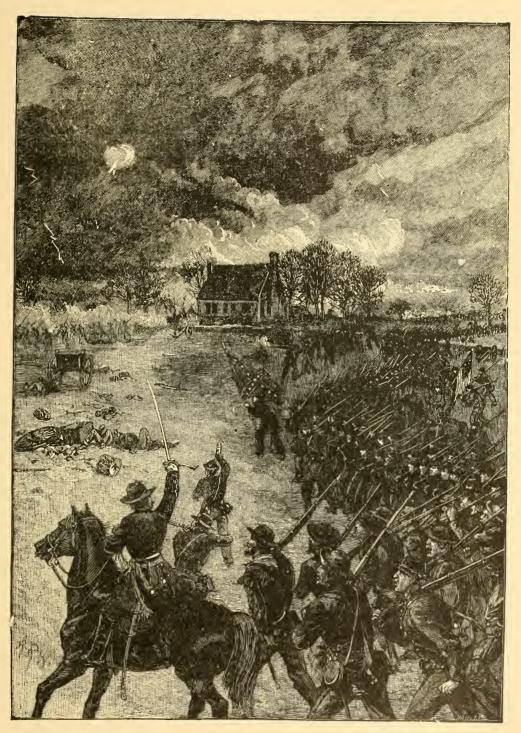


BATTLE OF WAGRAM
AT THIS VILLAGE, TEN MILES NORTH-EAST OF VIENNA, THE AUSTRIANS WERE DEFEATED BY NAPOLEON IN A BLOONY RATTLE
JULY, 5TH AND 6TH. 1809



COMMODORE PERRY'S FAMOUS VICTORY ON LAKE ERIE

N THE MIDST OF THE BATTLE HIS FLAGSHIP WAS DISABLED AND HE PASSED IN AN OPEN BOAT TO THE NEXT LARGEST SHIP, AND יקה אקר און THE TAG TO HER. HAVING GAINED A SPLENDID VICTORY HE ANNOUNCED IT IN THE "ELL-KNOWN MESSAGE," WE HAVE MEI THE ENEMY AND THEY ARE OURS".



BATTLE OF CHANCELLORSVILLE-JACKSON'S ATTACK ON THE RIGHT WING.

the sixth corps, under Sedgwick, to cross the Rappahannock below Fredericks-burg, he threw his main body across the river a few miles higher up, and before Lee understood his purpose he had advanced to Chancellorsville. Here Lee won one of the most marked of his victories, May 1 to 4, with only one-half as many men as Hooker commanded.

Battle and Heavy Losses.

Jackson made a magnificent attack upon the Union right, taking it by surprise, and drove it back in confusion. Sedgwick, on the left, had carried the heights of Fredericksburg, and was pushing on toward Chancellorsville, when the disaster on the right enabled Lee to face him with the main Confederate force. Sedgwick was compelled to retire during the night which followed the 4th of May, and Hooker recrossed the Rappahannock the next night. Hooker's loss was 16,000; Lee's was 12,000; but the Confederates further sustained a severe disaster in the death of Stonewall Jackson.

Lee now repeated the manœuvre he had practiced after defeating General Pope. Turning Hooker's right flank, he pushed on through the western part of Maryland into Pennsylvania, so as to threaten Philadelphia, Baltimore, and Washington. There was intense alarm at the North, and reinforcements were hurried into Pennsylvania from all quarters. In consequence of a disagreement with General Halleck, Hooker resigned the command of the Army of the Potomac, and it was given to General George G. Meade.

The hostile armies, each in full force were now moving in parallel tines, with the Blue Ridge and South

Mountain range between them. On the 1st of July they came into collision at Gettysburg. A tremendous battle was fought, lasting until the close of July 3d. It resulted in the defeat of Lee, with a loss of about 23,000 mem; Meade's loss was about the same. This battle was one of the greatest of modern times, the loss on both sides being very heavy in proportion to the whole number engaged. It was also the turning point of the Civil War.

The South was never able to collect so fine an army again, and never recovered from the exhaustion of the Gettysburg campaign. Lee moved slowly back to his old position on the Rapidan, where he and Meade held each other in check until the following spring. Many in the North were inclined to believe that Lee's former successes had been due to Stonewall Jackson's ability, and that he had lost his prestige upon the death of that brave commander. But the campaign of 1864 was to prove the contrary.

Grant's Victory at Vicksburg.

On the next day after the battle of Gettysburg, General Grant gained a decisive victory on the Mississippi. Having failed in several attempts to take Vicksburg from the North, he now determined to transfer his army to the south side of this strongly-fortified place. To do this it was necessary to cross the river, march down its west bank, cross again below Vicksburg, and march up the east bank, while the fleet, which had run past the batteries of Vicksburg after the capture of New Orleans, would have to pass them again in order to transport the army over the river and protect the crossing.

GENERAL PICKETT'S FAMOUS CHARGE AT GETTYSBURG.

This plan was carried out in April. Commodore Porter performed his task successfully under a heavy fire, and on the 20th of April opened a cannonade upon Grand Gulf, at the mouth of the Big Black River, where it had been determined to attempt a crossing. The Confederate batteries here proving too strong, the fleet ran past them also, and the crossing was made at Bruinsburg, a few miles below. Grant now pushed rapidly forward. The Confederates were beaten at Port Gibson, and compelled to evacuate Grand Gulf. McPherson and Sherman captured Jackson, the capital of Mississippi, and a place of great military importance, on account of its railway connections.

Surrenders After Long Siege.

The Union army then turned, fell upon the Confederate general, Pemberton, who had marched out of Vicksburg to unite with Johnston, defeated him at Champion Hills May 16th, and at the crossing of the Black River May 17th, and at last shut him up in Vicksburg. After a siege of forty-five days Pemberton surrendered, and the great Confederate stronghold of the West, with 27,000 prisoners, fell into the hands of the victorious Federals.

Port Hudson, under siege at the same time, could no longer hold out, and the Mississippi, as President Lincoln said, "ran unvexed to the sea." This was the heaviest blow that the Confederacy had as yet received; its whole western one was now virtually conquered, and it became possible to concentrate greater Union forces against its middle and eastern zones. The news of Gettysburg and Vicksburg made the Fourth of July, 1363, a day of rejoicing in the North,

and of mourning in thousands of bereaved homes.

The Vicksburg campaign marked the decline of the Confederate fortunes in the West, as the Gettysburg campaign did in the East. In the meantime the people had learned to give a more careful attention to the welfare of the soldiers who were bearing the brunt of the conflict. The Sanitary Commission, the Christian Commission, and other voluntary associations, had been organized, and were doing a grand work for the moral and physical needs of the men in the field; and this care was not confined solely to Northern troops, but was often extended to the Confederates as well.

The expenses of the national government for prosecuting the war now amounted to \$2,000,000 per day on an average, and notwithstanding the heavy taxation imposed upon the country, the debt had increased to \$500,000,000 by June, 1862; during 1863 it was double that amount; by June, 1864, it had grown to \$1,700,000,000, and at the end of August, 1865, it attained its maximum, \$2,845,907,626.

Money Carefully Spent.

But the best of care and judgment was exercised in the use of these vast expenditures. The army was constantly supplied with improved weapons and munitions of war; the blockading fleets were kept in perfect order, and everything was done to insure the success of the Union arms.

As early as April, 1862, the Confederate Congress had passed a conscription act, enrolling in the army all adult white males below a certain age, but as the war went on the demand for men became continually greater, and the

conscription was made more sweeping. Toward the end of the war every white man between the ages of seventeen and fifty-five was held liable to military service, and in practice the only limit was physical incapacity.

The Federal government also was compelled to take almost a similar course. In March, 1863, Congress passed an act for the enrollment of all ablebodied male citizens between the ages of eighteen and forty-five, and the President was authorized to make drafts for military service, those between twenty and thirty-five to be first called upon. Under this law a call for 300,000 troops was made in May. As the full number was not made up by volunteering a draft was ordered to supply the deficiency. The first attempts to carry it out resulted in forcible resistance in many places, the most notable being the "draft riots" in New York city in July, just after the battle of Gettysburg.

Riots in New York.

These riots lasted four days in that city. During this time New York was in the hands of a lawless mob, many shocking murders were committed and \$2,000,000 worth of property was destroyed. All opposition was at length put down, but exemptions and substitute purchases were freely permitted, and the States endeavored to fill their respective quotas as far as possible by offering bounties as a stimulus to volunteering.

After his renowned victory near Murfreesboro, Rosecrans remained quiet for a period, preparing for a new campaign. Late in June he began a series of skillful movements against Bragg which compelled the Confederate general to fall back upon Chattanooga. Early in September Rosecrans forced him to evacuate the place by threatening his communications. The Union general followed him across the Tennessee river and was thus beyond the strong position of Chattanooga. General Bragg, having been heavily reinforced from Virginia, turned at Chickamauga creek to give battle.

The Heroic Thomas.

A severe engagement was fought, September 17-20, 1863, in which Longstreet, who had come to the aid of Bragg, routed the right of the Union forces: but the wonderful skill and bravery of General Thomas, who commanded the left wing, saved the Federal army and secured its retreat to Chattanooga. Bragg, having gained possession of the mountains around the place, cut off almost all avenues of further retreat and laid siege to Chattanooga. The government at Washington had committed the mistake of dividing the Union forces, for while Rosecrans was left to face an army greatly superior in numbers, under General Bragg, General Burnside was sent into east Tennessee with an independent command.

Bragg was now so sure of Rosecrans' defeat that he dispatched Longstreet with a part of his army to attack Burnside at Knoxville. In October Rosecrans was superseded by Thomas, and Grant was put in command of all the western armies. He was joined at Chattanooga by two corps under Hooker from the Potomac. General Sherman came up from Vicksburg with a greater part of the army of the Tennessee. Bragg's positions on Lookout Mountain and Missionary Ridge were now assaulted.

The former was successfully stormed by Hooker, November 24th, part of the fighting taking place amidst a thick mist which covered the summit, hence this has been called the "battle above ston. Longstreet raised the siege of Knoxville and retreated across the mountains into Virginia to join Lee.

mist which covered the summit, hence this has been called the "battle above duce Charleston, South Carolina, the



LONGSTREET'S ARRIVAL AT BRAGG'S HEADQUARTERS.

the clouds." On the next day Missionary Ridge was carried by the main army, Hooker on the right, Thomas in the centre and Sherman on the left. Bragg was driven from all his positions back to Dalton, and was soon afterward superseded by General J. E. John-

strongest, as well as the most important of the Southern seaports, but without success. At length Fort Wagner was taken, September 7th, after a tremendous bombardment by the Federal fleet and Gillmore's batteries; Fort Sumter, also, was reduced to ruins The block-

ading vessels were thus enabled to enter the harbor, and the port of Charleston was entirely closed.

Taking advantage of every loophole in the British foreign enlistment act. the Confederate authorities had succeeded in fitting out several formidable cruisers, which, in the course of the year 1863, did immense damage to American commerce. Whenever they were closely pursued by United States vessels they took refuge in neutral ports, and then put out to sea again upon the first favorable opportunity. The most active ones were the Florida, the Alabama and the Georgia. The Florida, built at Liverpool, after having captured twenty-one vessels, was seized in the harbor of Bahia, Brazil, October, 1864. The Georgia was built at Glasgow, put to sea in April, but was captured after a short cruise by the United States frigate Niagara. The more important of the Confederate cruisers was the Alabama. She was built at Liverpool for the Confederate captain, Semmes.

Allowed to Escape.

The British government was urged by the American minister, Mr. Adams, to enforce its own laws, and prevent her going to sea; yet she was allowed to set sail in July. After destroying more than sixty vessels, she was met by the United States steamer Kearsage, commanded by Captain Winslow, off Cherbourg, June 19, 1864, and after an hour's action the Alabama was sunk.

At the beginning of 1864, several detached operations were carried on which, though attracting much attention at the time, had but little direct bearing upon the closing campaigns of

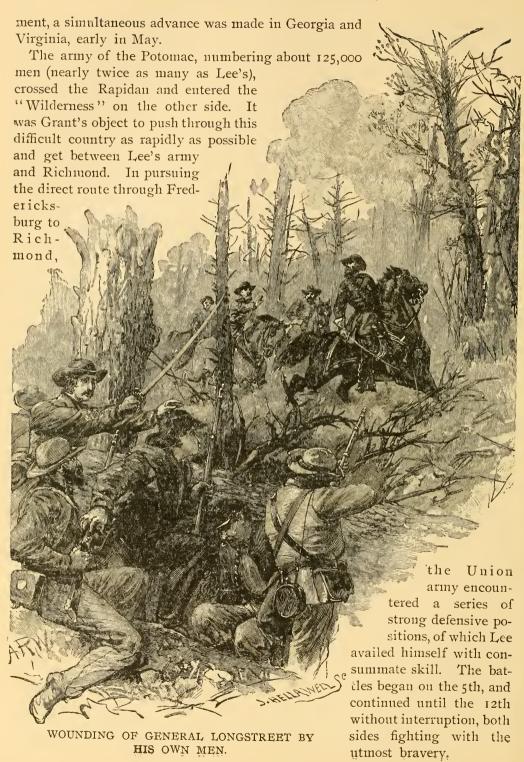
the war. General Sherman made his raid nearly across the State of Mississippi, destroying railroads, bridges and supplies. General Seymour, leading a Union expedition into Florida, was defeated. General Banks was sent up the Red river to attack Shreveport, and bring away cotton. The expedition ended in failure and disaster.

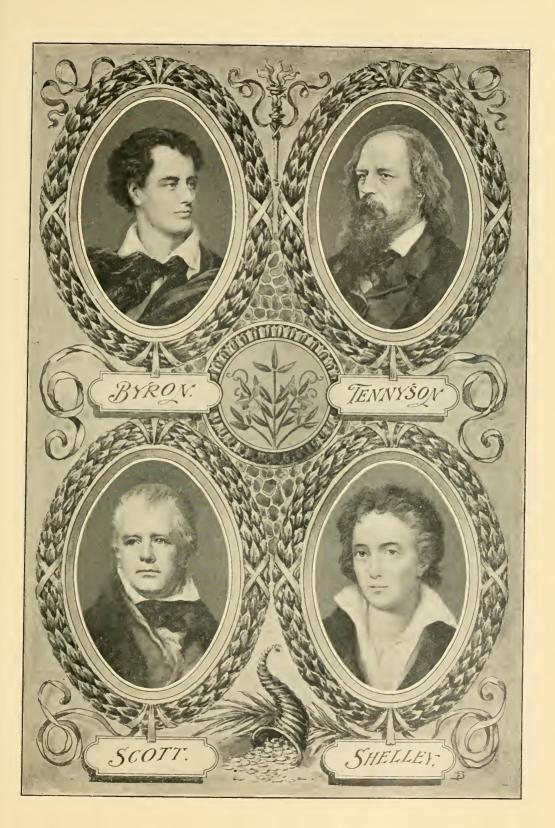
General Rosecrans was appointed to command in Missouri. He succeeded in repelling an invasion by Price, who was finally driven from the State. General Forrest, with a Confederate force, made a raid into Tennessee and Kentucky, and captured Fort Pillow, April 12th, where a number of negro troops were massacred.

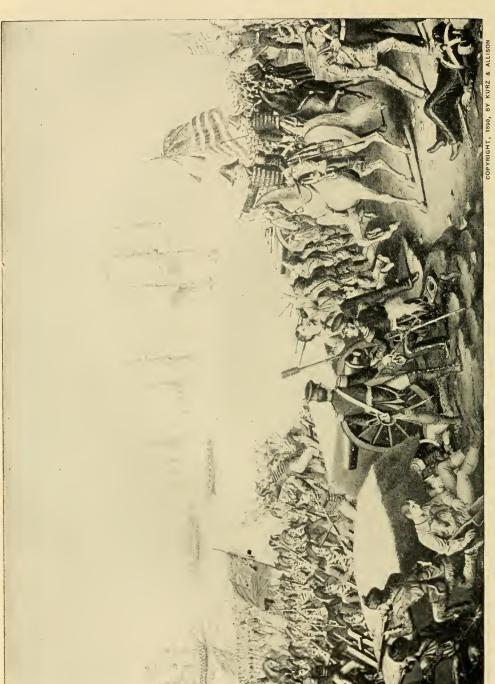
New Commander-in-Chief.

The success of Grant in the west had made him the chief figure in the war. In March, 1864, he superseded Halleck as commander-in-chief, with the rank of lieutenant-general. He at once took personal direction of the campaign against Richmond, while retaining Meade in immediate command. The army of the Potomac was re-organized in three corps, under Hancock, Warren and Sedgwick, to which was soon added another under Burnside, while General Philip Sheridan was called from the west, and appointed to the command of all the cavalry in the eastern army.

Lee's forces, which comprised the flower of the Southern troops, had otherwise been divided into three corps, under Generals A. P. Hill, Ewell and Longstreet. Sherman had been left in command of the three western armies of the Ohio, the Cumberland, and the Tennessee, and he was to oppose Johnston at Dalton. According to arrange-

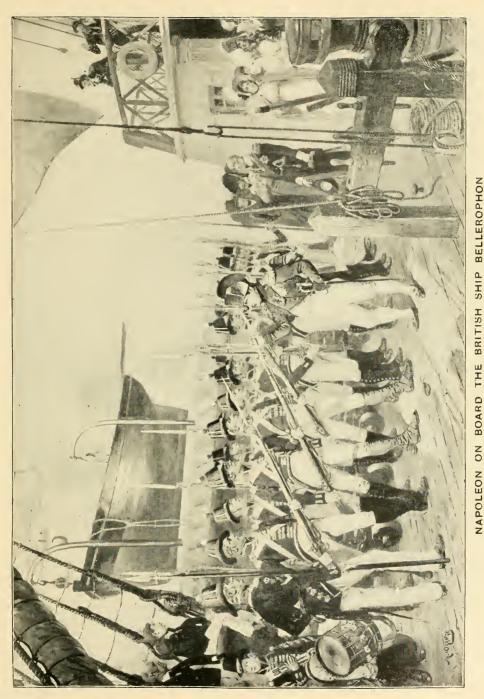




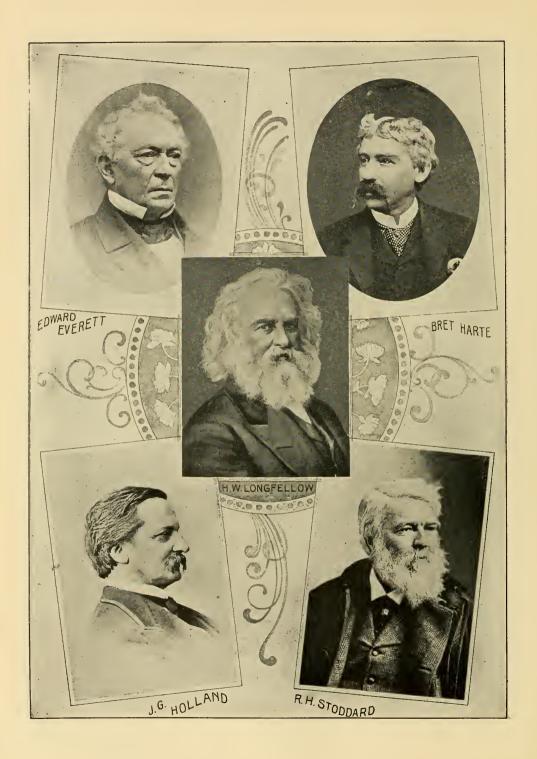


BATTLE OF NEW ORLEANS

FOUGHT JANUARY 8TH, 1815. THE BRITISH ARMY UNDER GENERAL PAKENHAM ATTACKED THE AMERICAN ARMY, COMMANDED BY GENERAL ANDREW JACKSON, AND WERE REPULSED WITH A LOSS OF 2600 MEN, INCLUDING THEIR COMMANDER, WHILE THE AMERICAN LOSS WAS BUT 8 KILLED AND 13 WOUNDED



AFTER THE BATTLE OF WATERLOO NAPOLEON, FINDING IT IMPOSSIBLE TO ESCAPE FROM FRANCE, SURRENDERED TO CAPTAIN MAITLAND OF THE BELLEROPHON AT ROCHEFORT, AND WAS BANISHED BY THE BRITISH GOVERNMENT TO ST, HELE!



It was during these engagements that General Longstreet was disabled by an unfortunate blunder of his own troops. They mistook him and his men for Union cavalry and fired a volley at them. Longstreet waved his hand and shouted to them to stop firing. They did so, but not until a bullet passed through his throat, coming out at the shoulder. He fell from his horse, and

Anna and Cold Harbor in which the Union losses were terrible. Having now reached the Chickahominy, and finding it impossible to break through Lee's lines of defense, Grant crossed the river and moving far to the right of his adversary, transferred his army beyond the James to assail Richmond from the south.

This involved the reduction of the



BATTLE OF COLD HARBOR,

was believed to be dead. Such a calamity spread dismay for a time in the Confederate ranks. Longstreet was only badly wounded and was disabled for the remainder of the campaign.

Lee was steadily forced back, and on the 9th Grant was clear of the Wilderness with his forces concentrated near Spottsylvania court-house. Here there was furious and obstinate fighting for ten days, with scarcely any intermission. Then followed the battles of North

strongly-fortified town of Petersburg, on the Appomattox, practically a part of the defenses of Richmond, from which it was twenty miles distant. It also brought the Federal lines into dangerous proximity to Lee's railroad communications with the south. At this point, therefore, the Confederate commander stationed the best part of his troops, and stubbornly resisted all Grant's efforts to extend his lines further to the southwest or to reach the railroads.

A long siege of Richmond and Petersburg was now begun early in June, but neither army remained inactive. July, Lee sent Early into the Shenandoah valley, with a corps strong enough to menace Washington, hoping that Grant might be induced to call off troops from Petersburg. The chief result of Early's movement was the burning of Chambersburg, and the capture of a quantity of supplies. Grant put Sheridan in command of the valley, who defeated General Early at Winchester, September 19th, and at Fisher's Hill two days later, after which he destroyed all the rich crops in the valley and carried off the cattle, so that the Confederates might not be tempted to repeat the raid.

Battle of Cedar Creek.

Brt Early, having obtained fresh troop. suddenly fell upon the Federals at Cedar Creek, October 19th, driving them back in great confusion. Sheridan was absent when the battle was fought, but, getting intelligence of it, he rode rapidly up the valley, rallied his men, who were, however, being enheartened by their respective commanders, and scattered Early's forces, which never met Sheridan again as a compact army during the remainder of the war.

Meanwhile, Grant had succeeded in getting possession of a few miles of the Weldon railroad, upon which Lee depended for transportation, but the Confederate general brought his supplies in wagons round that portion held by the Federals. The two armies now remained in comparatively the same position until the following spring.

The western campaign in 1864 began at the same time as Grant's movement

in Virginia. Sherman advanced from Chattanooga with 100,000 men under Thomas, McPherson, and Schofield, against Johnston's force of 75,000. The objective point of the campaign was the capture of Atlanta, Georgia, a very strongly fortified place about one hundred miles south of Chattanooga, and the chief manufactory of the Confederate military supplies. Johnston, with his weaker force, dared not risk a regular battle, but he made the best use of various defensive positions which therough and mountainous country afforded.

Sherman's Brilliant Tactics.

By a series of masterly flank movements Sherman compelled him to evacuate one position after another. On May 14th the warrior-bishop, Leonidas Polk, was killed by an exploding shell while standing with Johnston and Hardee on the crest of Pine Mountain. Severe battles were fought at Resaca, May 15th: Dallas, May 25th; Lost Mountain, June 14th, and Kenesaw Mountain, June 27th. By the 10th of July Johnston was intrenched behind the defences of Atlanta, and the two armies were facing each other with the Chattahoochee river between them. Johnston's retreat had been conducted with great skill, but he was now superseded by Hood, July 17th, who was known as a "fighting general." Hood at once proceeded to carry out the active policy of the Confederate government, and assumed the offensive. Before the end of the month he had made three furious assaults on the Union lines and was repulsed in every one of them.

The Federals, however, sustained a heavy loss in the death of General Mc-Pherson. At length, by fine manœuvering, Sherman succeeded in gaining the

END OF THE GREAT CIVIL WAR. rear of Atlanta, and cutting the supply | federacy. He moved northwestward railroads. This obliged the Confed- by Tuscumbia and Florence into miderates to retreat in all haste, and on the 2d of September, Sherman was able to telegraph to Washington that Atlanta was won. dle Tennes. see, thinking that Sherman would follow him in order to defend that State. But Sherman was no more to be controlled by this device than Grant had been by Early's raid into the Shenandoah. He divided his army, sending back part of it under Thomas to take care of

made a fatal mistake, which materially hastened the downfall of the Con- at Nashville with about 44,000 men.

DEATH OF GENERAL POLK.

Georgia. Hood, moving northward toward Nashville, was met and defeated at Franklin, No-Hood, by the command of Davis, now | vember 30th, with heavy loss, by Schofield. The Confederate general arrived

Hood, while he himself prepared to continue his advance through

The Union forces awaited him there behind the fortifications. Thomas, having completed his preparations, suddenly moved out of his works and fell upon the Confederate lines, December 15th. The battle lasted two days and ended u the utter rout and demoralization of lood's forces. Thus one of the two great armies of the Confederacy was scattered, never again to be united. Of all the battles fought in the course of the war, this was the most complete victory.

Presidential Election.

While these things were going on, the presidential election of 1864 took place. Some of the more radical men, dissatisfied with what they called Mr. Lincoln's timid and irresolute policy, met in convention, May 31st, at Cleveland, Ohio, and nominated John C. Fremont for the Presidency. Mr. Lincoln and Andrew Johnson were nominated, June 7th, for President and Vice-President by the Republican National Convention at Baltimore.

The Democratic National Convention declared in its platform that the inability of the Federal government to restore the Union by war was demonstrated by four years of failure; that the constitution had been violated in all its parts under the plea of military necessity; and that a cessation of hostilities ought to be obtained. It nominated George B. McClellan and George H. Pendleton as President and Vice-President.

This declaration of the peace Democracy that the war was a failure, when all things were now pointing toward the final success of the North, caused many doubtful votes to be cast for the Republican candidates, and assured their elec-

tion. When the electoral votes were counted, Lincoln and Johnson had received 212; McClellan and Pendleton received 21.

Sherman had burned Atlanta, destroyed the railroads and telegraphs in his rear, sent back the sick and wounded, and much of the baggage, and set out, November 14th, on his "famous march through Georgia." His army, 65,000 strong, was spread out over a breadth of forty miles, subsisting mainly on the produce of the country. For a month scarcely anything was heard of him at the North, when he suddenly turned up at Savannah, Ga. He had met with but little opposition on his route. The Confederates had numerous bodies of troops which might have been concentrated to oppose his march, but he had threatened so many points, and kept the enemy in so much doubt as to his objects, that they could not tell for which point he was making.

A Christmas Gift.

On December 13th Fort McAllister was taken by assault, and on the 20th Savannah was evacuated by the Confederates, Sherman sending the news of the capture to President Lincoln as a "Christmas gift." He also sent word that the Confederacy was nothing but a shell, and that he was ready with his victorious army to march northward.

The only important ports, except Galveston, which remained open to the Confederacy in the summer of 1864, were Mobile, in Alabama, and Wilmington, in North Carolina. The forts commanding the entrance to Mobile bay were captured, August 5th, and the port was closed. On January 16, 1865, Wilmington, North Carolina, was taken by a

Combined land and naval force, under General Terry and Commodore Porter. On the day before this event, Sherman had begun his northward march, passing through Columbia to Fayetteville, North Carolina.

This movement had forced the evacuation of Charleston and other coast cities, and their garrisons had been concentrated under Johnston as a last hope. The military support of the Confederacy now rested on the army which Lee commanded within the intrenchments of Richmond and Petersburg, and on the remnant of the western forces with which Johnston was trying to check Sherman's advance. Some sharp fighting took place north of Fayetteville, but Goldsborough was reached March 21st, and Johnston retreated to Raleigh. man pushed on after him, but events in Virginia were fast rendering a contest in North Carolina unnecessary.

Lee's Situation Desperate.

While the Union army occupied Goldsborough, Sherman took a steamer on the coast and hurriedly visited the James river, where he met the President, General Grant and General Meade, and arranged with them the plan of operations for the future. During Sherman's march through North Carolina, Sheridan had led a column of cavalry up the Shenandoah valley to destroy Lee's communications in the rear of Richmond. passed along the James river, doing great damage to the canal and railroads and joined the main army in front of Petersburg just as Sherman arrived there for his conference with the President and Grant.

The situation of Lee was now becoming desperate. He determined to aban-

don Petersburg and Riehmond, move by way of Danville and effect a junction with Johnston. With this purpose he made one desperate attempt to break the center of the Union lines at Fort Steadman, intending under cover of the attack to withdraw his force. The ef fort failed, and Lee was repulsed with heavy loss. Grant resumed his attempts to push his lines further round to the south of Petersburg.

Sheridan was put in command of the extreme left, assailing Lee's right at Five Forks, April 1st, destroying the Southside railroad, and maintained his position.

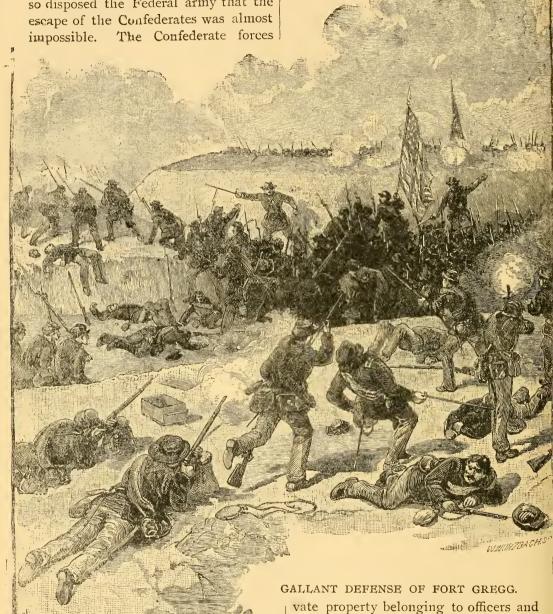
Three Fierce Assaults.

The Confederate forts Alexander and Gregg made a stubborn resistance. For a time the fate of the Confederate Army of Northern Virginia depended on Fort Gregg; for, if it could not be held until Lee had time to take a new position, his army was doomed. It repelled three assaults by the Union troops, but the fourth carried them over and into the works, where they found that, out of the two hundred and fifty comprising the garrison, only thirty were unhurt. All the rest were killed or wounded.

To avoid being outflanked Lee was compelled to lengthen out his line, already too thin. The next morning, April 2d, Grant made a general assault and carried his army within the lines of the Petersburg defences. Lee retreated, with the intention of bringing his forces and Johnston's together for a final stand, while the advance guard of the Union army entered Richmond. The Confederate authorities hastened to escape to Danville, having first set fire to the shipping, tobacco warehouses, etc., at Richmond.

No time was lost in celebrations of the victory. Grant pressed on in the pursuit of Lee with all vigor. He had so disposed the Federal army that the escape of the Confederates was almost impossible. The Confederate forces

No time was lost in celebrations of 9, 1865. The terms of surrender offered e victory. Grant pressed on in the by Grant were very generous; all pri-



were headed off at Appointation Court "because," Grant said, "they would House, where the currendered, April need them for the work on their farms."

vate property belonging to officers and soldiers was to be retained, the men were even allowed to keep their horses, "because," Grant said, "they would need them for the work on their farms."

Officers and men were at once set free on parole, with the understanding that so long as they did not violate their parole, nor break the laws, they would not be disturbed by the Federal government.

Sherman had begun his final operations against Johnston when the news arrived of the surrender of Lee. Johnston thereupon capitulated April 26 on much the same terms that had been accorded to the Confederate army in Virginia after an unsuccessful effort at a more favorable settlement. All the other Confederate forces in the field also surrendered, and the great Civil War came to an end. The news was received with an outburst of joy at the North.

End of the Great Struggle.

Mr. Lincoln had begun his second term on March 4, 1865. At that time the end of the struggle was plainly near, and the President in his inaugural address had already expressed the hope that there would be a reconciliation between the two sections. He said: "With malice toward none, with charity for all, with firmness in the right as God gives us to see the right, let us strive to finish the work we are in, to bind up the nation's wounds, to care for him who shall have borne the battle, and for his widow and for his orphans; to do all which may achieve and cherish a just and a lasting peace among ourselves and with all nations."

The public rejoicings over the capture of Richmond were clouded by the death of the wise and noble Lincoln. He had gone to Ford's theatre on the evening of April 14, and was sitting in his box, when an actor named J. Wilkes Booth entered unperceived and shot

the President through the head, crying: "The South is avenged. Sic semper tyrannis." Almost at the same time one of Booth's accomplices named Payne attempted to assassinate Secretary Seward, who was ill at home, and wounded him seriously, but not fatally. There had been a plot on the part of some desperate characters when the Confederacy fell, to destroy the leaders of the Federal government, but their plans were accomplished in part only.

Death of the Assassins.

The chief parties implicated perished ma erably. Booth and Payne escaped for a time, but were soon caught. Booth was killed while resisting arrest. Payne and three others were hanged, and several persons concerned in the plot were sentenced to imprisonment.

The President lingered a few hours and died without giving any sign of consciousness. His death caused the deepest sorrow, not only in the North, but in the South as well, and throughout all the civilized world. He had won the abiding love and trust of the people, and his name will forever be linked with that of Washington; for he was in many ways the second founder of his country.

Jefferson Davis, while trying to escape, was captured by a detachment of General J. H. Wilson's cavalry at Irwinsville, Georgia, and sent to For-tress Monroe. Here he was confined a close prisoner for a long time on the charge of treason. He was at last liberated on bail furnished by Horace Greeley and others, and all proceedings against him were finally abandoned. In fact, the glorious triumph of the government of the United States was in no wise sul-

lied by any dismal executions for treason.

The assassination of Lincoln checked for a time the movement which had already begun for the restoration of the seceding States. People who had been ready in their joy to make peace with those who had been leaders in the Confederacy now were ready to believe that the spirit which had brought on the war was unchanged. There was a demand that the laws against treason, passed by Congress during the heat of the war, in 1862, should be rigidly enforced. These laws prescribed that the punishment of treason and rebellion should be death, or fine and imprisonment.

Amnesty for Traitors.

But a wiser judgment prevailed. There was no hanging for treason. The leaders of the Confederacy were never brought to trial. The president of the Confederate States was suffered to go free; and the vice-president, before his death, became an efficient and respected member in the Congress of the United States. For a long time, however, all persons who had previously taken oath of allegiance to the Federal government, and then had broken it by joining the Confederacy, were debarred from holding any office under the government of the United States.

The expenses of the Federal government amounted at one time to three and a half million dollars a day. By August 31, 1865, the whole debt had reached its maximum, amounting to about \$2,845,907,626. Some \$800,000,000 of revenue had also been spent

mainly on the war. Beside the regular outlay by the government enormous sums were spent by States, cities, counties and towns in bounties to volunteers, and by the sanitary commissions and other societies for the comfort of sick and wounded soldiers, and for the whole army in general. The expenses of the Confederate government can never be known. Its debt was estimated at about \$2,000,000,000,000, but this was wiped out by the failure of the Confederacy, all its bonds and notes becoming worthless.

Vast Destruction of Property.

The amount of property destroyed by the Union and Confederate armies can scarcely be estimated, and the money value (\$2,000,000,000) of the slaves in the South fell a sacrifice to the war. In the United States funds were raised by the sale of bonds, the issue of paper money, of "greenbacks" and the imposition of heavy taxes, including, for some years, a tax on incomes. The notes became greatly depreciated, so that in July, 1864, the price of gold in paper currency was nearly three dollars. Gold and silver almost disappeared from circulation.

The finances of the Confederacy were in a ruinous condition long before the end of the war. It could make no drafts on the future by bond issues, and it was a very difficult matter to find purchasers for southern bonds. As expenses increased they had to be met by paper issues, and each issue was accompanied by a corresponding decline in value, until a dollar in coin was worth fifty dollars in paper.

CHAPTER VII.

From the Restoration of the Union to Our War with Spain.

HE most important event following close upon the restoration of peace was the opening of the Pacific railway from the Missouri river to the Pacific Ocean in 1869. The eastern division of this road is known as the Union Pacific railway, and was begun at Omalia, Nebraska, in December, 1863, and carried westward. But little progress was made in the work until 1865, when it was pushed rapidly forward.

The western division, known as the Central Pacific railway, was begun at San Francisco, about the same time, and carried eastward across the Sierra Nevada. The two roads united at Ogden, near Salt Lake City, in Utah, and the union was accomplished on the tenth of May, 1869, on which day the last rail was laid. The Union Pacific railway, from Omaha to Ogden, is one thousand and thirty-two miles in length; the Central Pacific, from Ogden to San Francisco, eight hundred and eighty-two miles; making a total line of nineteen hundred and fourteen miles.

Immediately upon the opening of President Lincoln's second term of office, Mr. Charles Francis Adams, the American minister at the court of St. James, was instructed to call the attention of the British Government to the depredations committed upon American commerce by Confederate cruisers, built, equipped and manned in England, and to insist upon the responsibility of Great Britain for the losses thus incurred by American ship-owners. Mr. Adams discharged this duty in a com-

munication addressed to the British Government on April 7th, 1865. This led to a correspondence which continued through the summer of that year. Great Britain refused to admit the validity of the American claim, or to submit the question to the arbitration of any foreign government. The "Alabama question" remained unsettled for several years, and occasioned a considerable amount of ill-feeling between the two countries. Both governments regarded it as full of danger, but to Great Britain it was especially so, as in the event of a war between that country and any foreign power, the United States, following the example of England, might and doubtless would allow cruisers to be sent out from their ports which would seriously cripple, if they did not destroy, the British commerce.

Court of Arbitration.

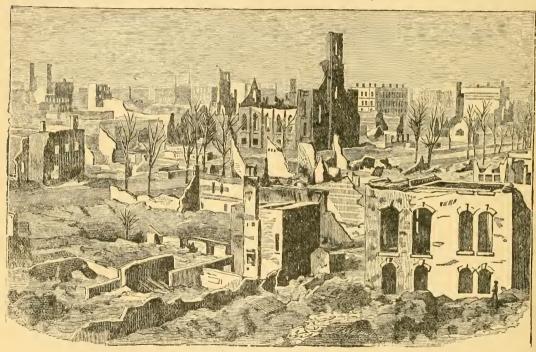
After Mr. Adams' return from England, his successor, Reverdy Johnson, was directed by the President to reopen the matter. He negotiated a treaty with the Earl of Clarendon on behalt of the British Government in 1369, but this arrangement was unsatisfactory to the Senate, which body refused to ratify it.

Two years later the matter was revived, and in 1871 a joint high commission, composed of a number of distinguished public men, appointed by the American and British Governments, met at Washington, and arranged a settlement known as the treaty of Washington, which was ratified by both

Governments. This treaty was ratified to by the Senate on the twenty-fourth of May, and provided for the settlement not only of the Alabama claims, but of all other questions at issue between the United States and Great Britain.

The Alabama claims were referred by the treaty of Washington to a board of arbitration composed of five commis-

On the night of Sunday, October 8, 1871, a fire broke out in the city of Chicago, and raged with tremendous violence for two days, laying the greater part of the city in ashes. It was the most destructive conflagration of modern times. The total area of the city burned over was two thousand one hundred and twenty-four acres, sioners selected from the neutral na- or very nearly three and one-third



CHICAGO AFTER THE FIRE.

cions. This board met at Geneva, in Switzerland, on the fifteenth day of April, 1872, and the American and English representatives presented to it their respective cases, which had been prepared by the most learned counsel in both countries. On the twentyseventh of June the board announced its decision. The claims of the United States were admitted, and the damages awarded our Government were \$16,-250,000. These were paid in due time.

square miles. The number of buildings destroyed was seventeen thousand four hundred and fifty. About two hundred and fifty persons died from various causes during the conflagration, and ninety-eight thousand persons were rendered homeless by it. The entire business quarter was destroyed. The actual loss will never be known. As far as it can be ascertained, it was about one hundred and ninety-six millions of dollars.

On the 20th of May, 1872, Congress passed an act removing the disabilities imposed upon the Southern people by the third section of the fourteenth amendment to the Constitution. From this general exemption were excepted all persons who had been members of Congress officers of the army or navy, heads of departments under the general government or ministers to foreign countries, who nad resigned their positions and joined the secession movement. By this act at least one hundred and fifty thousand men of capacity and experience, whose services were greatly needed by the South, were restored to political life.

Discontent in Cuba.

For many years Cuba had been growing dissatisfied with the rule of Spain. In 1868 a revolution broke out in that island, having for its object the expulsion of the Spaniards and the establishment of the independence of Cuba. The patriot army was able to win numerous successes over the Spanish troops, and for several years maintained its position against every effort to dislodge it.

Very great sympathy was manifested for the Cuban patriots by the people of the United States, and repeated efforts were made to induce the government of this country to recognize the independence of Cuba and assist the patriots, or at least to acknowledge their rights as belligerents. The government, however, faithfully observed its obligations as a neutral power, and forbade the organization or departure of all expeditions from this country for the assistance of the Cubans. The Cuban agents were prevented from shipping arms or military supplies to their forces, and several

vessels intended to serve as cruisers against the Spanish commerce were seized and detained by the Federal authorities.

In spite of the precautions of the government, however, several expeditions aid succeed in getting to sea and reaching Cuba. One of these embarked on the steamer Virginius, in the fall of 1873. When off the coast of Jamaica the Spanish war steamer Tornado was sighted. She at once gave chase, and though the Virginius was on the high seas and was flying the American flag, overhauled her and took possession of her on the thirty-first of October. The Tornado then carried her prize into the port of Santiago de Cuba, which was reached the next day. Captain Fry, the commander of the Virginius, and the crew and passengers of the vessel were thrown into prison.

Wholesale Murder.

After a mock trial, in which the simplest forms of decency were disregarded, Captain Fry and a number of the crew and passengers of the Virginius, about thirty-five or forty in all, were shot by order of the military authorities. The other prisoners were held in a most cruel captivity to await the pleasure of the Spanish officials at Havana. The consul of the United States at Santiago de Cuba made great exertions to save Fry and those condemned to die with him. He was treated with great indignity by the Spanish officials, and was not allowed to communicate with Havana, from which point he could consult his government by telegraph.

When the news of the seizure of the Virginius at sea under the American

flag reached the United States it aroused a storm of indignation. Meetings were held in all the principal cities, and the press unanimously sustained the popular demand that the government should require satisfaction for the outrage upon its flag. The general sentiment of the people was in favor of instant war, and it was openly declared that a better opportunity would never arise to drive the Spaniards out of Cuba and obtain possession of the island.

The government acted with firmness and prudence. Several vessels of war were sent to Santiago de Cuba to prevent the execution of the surviving prisoners taken with the Virginius; the fleet in the West Indies was reinforced as rapidly as possible, and the navy was at once put on a war footing in order to be ready for any emergency. The President was urged to convene Congress in extra session, but he declined to do so, knowing that that body would be most 1. kely to yield to the popular demand for war, and he was anxious to settle the difficulty by peaceful means if possible.

Demands upon Spain.

General Sickles, the American minister at Madrid, was ordered to demand of the Spanish government the arrest and punishment of the officials implicated in the massacre of Captain Fry and his associates, a suitable indemnity in money for the families of the murdered men, an apology to the United States for the outrage upon their flag, and the surrender of the Virginius to the naval authorities of the United States.

These demands were at once submitted to Senor Castellar, the president of the Spanish republic. In the critical situation in which Spain was then placed

by her internal dissensions, Castellar had no choice but to submit to the American demands. Orders were at once transmitted to Cuba to surrender the Virginius and all the prisoners to the American naval forces.

The orders of the Spanish government were at first disregarded by the officials at Havana, who blustered a great deal, and declared their willingness to go to war with the United States. They were brought to their senses, however, by the warning of Captain General Jovellar, who told them that their refusal to obey the orders of the Madrid government would certainly involve them in a war with the United States, in which Spain would leave them to fight that power without aid from her. The Havana officials, therefore, yielded an ungracious obedience to the orders of the home government.

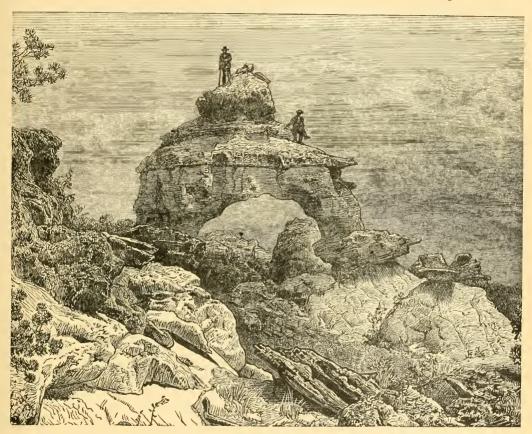
Fate of the Virginius.

The survivors of the Virginius expedition, who were in a most pitiable condition, in consequence of the cruelty with which they had been treated during their imprisonment, were released and delivered on board an American man-ofwar in the Harbor of Havana.

On the twelfth of December the Virginius, which had been taken to Havana by her captors some time before, was towed from that harbor and delivered to an American vessel sent to receive her. She was carried to Key West, from which port she was ordered to New York. On the voyage she foundered at sea in a gale off Cape Fear, on the twenty-sixth of December. At a later period the Spanish government paid the indemnity demanded by the United States.

On the ninth of November, 1872, a fire occurred in Boston, and burned until late on the tenth, sweeping over a area of sixty-five acres in the centre of the wholesale trade of the city, and destroying property to the amount of seventy-eight million dollars. As this fire was

at length became dissatisfied with their new location, which they declared was unable to afford them a support, and began a series of depredations upon the settlements of the whites, which soon drew upon them the vengeance of the Federal government. Troops were sent



THE LAVA BEDS-SCENE OF THE MODOC WAR.

confined to the business quarter of the city, comparatively few persons were deprived of their homes.

Early in 1873, a troublesome war began with the Modoc Indian tribe on the Pacific coast. These Indians had been removed by the government from their old homes in California to reservations in the northern part of Oregon. They

against them, but they retreated to their fastnesses in the lava beds, where they maintained a successful resistance for several months. The government at length reinforced the troops operating against them, and General Canby, commanding the department of the Pacific, assumed the immediate command of the troops in the field,

At the same time, a commission was appointed by the government to endeavor to settle the quarrel with the Indians peaceably. This commission held several conferences with Captain Jack, the head chief of the Modocs, and the other Indian leaders, but accomplished nothing. At length the commissioners and General Canby agreed to meet the Indians in the lava beds, a short distance in advance of the lines of the troops. They went unarmed and without an escort. While the conference was in progress, the Indians suddenly rose upon the commissioners and killed all but one, who managed to escape with severe wounds. General Cranby was shot down at the same time and died instantly.

Hanged Till They Were Dead.

The Indiansat once fled to their strongholds amid the rocks. The troops, infuriated by the murder of their commander, closed in upon them from all sides and shut them in the lava beds. Their position was one which a handful of men might defend against an army, and they held it with a desperate determination. They were dislodged finally by the shells of the American guns, and such as were not killed were captured. Captain Jack and his associates in the murder of General Canby and the commissioners were tried by a courtmartial and sentenced to death. They were hanged in the presence of their countrymen and of the troops on the third of October, 1873.

The year 1875 completed the period of one hundred years from the opening of the Revolution, and the events of 1775 were celebrated with appropriate commemorative ceremonies in the places

where they occurred. The centennial anniversary of the battles of Lexington and Concord was celebrated at those places on the nineteenth of April with great rejoicings. On the seventeenth of June the centennial of Bunker Hill was celebrated at Charlestown. Vast crowds were present from all parts of the country.

One of the most gratifying features of the celebration was the presence and hearty participation in the ceremonies of a large number of troops from the Southern States. Nearly all of these had served in the Confederate army, and their presence in the metropolis of New England was an emphatic proof that the Union had indeed been restored. The memory of the common glory won by the fathers of the republic did much to heal the wounds and obliterate the scars of the Civil War.

Centennial Exhibition.

As early as 1872 measures were set on foot for the proper observance of the one hundredth anniversary of the independdence of the United States. It was resolved to commemorate the close of the first century of the republic by an International Exhibition, to be held at Philadelphia in 1876, in which all the nations of the world were invited to participate. Preparations were at once set on foot for the great celebration.

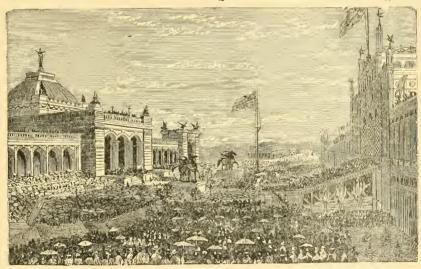
The European governments with great cordiality responded to the invitations, extended to them by the government of the United States, and on the 10th of May, 1876, the International Centennial Exhibition was opened with the most imposing ceremonies in the presence of an immense concourse of citizens from all parts of the Union, and

of the President of the United States and the Emperor of Brazil. The exhibition remained open from May Toth to November 10th, 1876, and was visited by more than ten million people from the various States of the Union, from Canada, South America and Europe. It was one of the grandest and most notable events of the century, and illustrated our country's progress.

The year 1876 was not destined to be entirely a period of peace. The Sioux Indians had ceded to the United States

with about 250 soldiers, was surprised by an overwhelming force of Indians and he and his entire command were massacred. Custer's men fought with wonderful bravery and exacted a fearful price for their lives at the hands of the savages. The war lasted into the winter of 1877, when the Sioux with their chiefs, Sitting Bull and Crazy Horse, went across the border into British territory.

Hon. James A. Garfield was inaugurated President March 4, 1881. He



CEREMONIES AT THE OPENING OF THE CENTENNIAL EXHIBITION.

a large tract of country in what was then Dakota Territory, reserving to themselves the district known as the Black Hills. When it was rumored that gold had been found on their reservation, the whites began to rush into this region, regardless of the rights of the Indians. The Sioux were a warlike tribe, and they retaliated by attacking the frontier settlements in Montana and Wyoming.

United States troops were sent against them, but met at first with a terrible disaster. In June, 1876, General Custer, had made plans for making a visit to New England, to be present at the commencement exercises of his Alma Mater, Williams College, in Massachusetts, and was to be accompanied by a distinguished party, including several members of the Cabinet. On the morning of the 2d of July the party proceeded to the Baltimore and Potomac depot, where they were to take the cars, in advance of the President, who arrived soon after in company with Secretary Blaine, who came simply to see him off and say good-bye. They left the

President's carriage together, and sauntered arm-in-arm through the depot towards the cars.

In passing through the ladies' waitingroom, the President was fired at twice by a man named Charles J. Guiteau. The first shot inflicted a slight wound in the President's right arm, and the second a terrible wound in the right side of his back, between the hip and hope and despair, and was kept all the while in a most painful suspense.

He was then removed to Long Branch, New Jersey, in the hope that sea-air would benefit him, and for a time there were renewed hopes of his recovery, but on September 19th a change for the worst appeared, and the brave struggle was brought to an end. The funeral took place amidst universal demonstra-



ASSASSINATION OF PRESIDENT GARFIELD.

the kidney. The President fell heavily to the floor, and the assassin was secured as he was seeking to make his escape from the building, and was conveyed to a police-station, from which he was subsequently taken to prison.

The two months following the wounding of President Garfield dragged wearily away, the patient at times showing symptoms of marked improvement, and at others experiencing dangerous relapses. The nation alternated between

On the 30th of June, 1882, the assassin was executed at Washington.

Early in 1891 active preparations were commenced for the appropriate celebration of the four hundredth anniversary of the discovery of America by Columbus. As the centennial anniversary of American independence in 1876 had been commemorated by an international exposition at Philadelphia, in which nearly all the civilized nations of the



earth participated, it was resolved to celebrate the discovery of the New World by an exhibition of grander proportions, as the only suitable method of giving dignity to the great occasion. The whole country became interested in the project, and it was advocated with unanimity by the newspaper press.

The act of Congress, which definitely selected Chicago as the city in which the Exposition should be held, and which fixed the dates of the celebration to be held in 1892, and the formal opening and closing of the Exposition in 1893, was approved by the President of the United States, April 25, 1890. The Exposition buildings were located in Jackson Park.

Dedication Ceremonies.

The grounds and buildings were so nearly ready that the dedication ceremonies were held in October, 1892. The celebration in New York extended over several days, ending on the 12th of October, and consisted of a magnificent military and naval parade. Vast numbers of people flocked to the metropolis from surrounding towns, and even distant localities, and participated in the festivities.

The greatest celebration, however, was in Chicago, occupying several days, and attended by multitudes of people. Vice-President Morton was present, also the governors of a number of States, together with distinguished persons from all parts of the country, including President Harrison's Cabinet, army and navy officers, and members of Congress.

On Monday, the 1st day of May, 1893, in the presence of 300,000 people, Grover Cleveland, President of the United his Cabinet, by a distinguished representation from lands across the seas, and a mighty throng of American citizens, pressed the electric button which set in motion the miles of shafting, the innumerable engines and machines, and the labyrinth of belting and gearing which made up the machinery of the World's Columbian Exposition.

At the same moment a National salute pealed forth from the gun, the "Andrew Johnson," lying off the Exposition grounds, in Lake Michigan; 700 flags released from their "tops" at a concerted signal swung loose, and streamed out under the sky in scarlet. vellow and blue.

In Machinery Hall a great roar arose, and the turrets of the building shook as the wheels began to turn, and a greater volume of sound arose from the throats of a concourse of people who thus acclaimed the opening of the grandest achievement of American pluck, enterprise and generosity.

President Starts Machinery.

From the centre of the platform proper there radiated a special stand, and upon this were chairs for President Cleveland, Vice-President Stevenson, the Duke of Veragua and his party, and the higher national and local officers of the Fair. Immediately in the rear were the sections assigned to the members of the Diplomatic Corps, while to their right and left the guests of the occasion were arranged; behind these were placed the orchestra.

Prayer was offered by Rev. W. H. Milburn, D.D., Chaplain of the United States Senate, after which a poem, written by Mr. W. A. Croffutt, was read. States, surrounded by the members of Then followed addresses by the Hon.

George R. Davis, Director-General of the Exposition, and President Cleveland.

As the President was concluding the final sentence of his address his eyes wandered to the table that was close at his left hand. Upon this was the button, the pressure upon which was to start the machinery and make the opening of the Exposition an accomplished fact. It rested upon a pedestal upholstered in navy blue and golden yellow plush, and on the sides of the lower tier, in silver letters, were the significant dates, 1492 and 1893. As the last words fell from the President's lips he pressed his finger upon the button.

Hallelujah Chorus.

This was the signal for a demonstration difficult of imagination, and infinitely more so of description. At one and the same instant the andience burst into a thundering shout, the orchestra pealeth forth the strains of the Hallelujalı Chorus, the wheels of the great Ellis engine in Machinery Hall commenced to revolve, the electric fountains in the lagoon threw their torrents towards the sky, a flood of water gushed from the McMonnies Fountain and rolled back again into the basin, the thunder of artillery came from the vessels in the lake, the chimes in Manufacturers' Hall and on the German Building rang out a merry peal, and overhead the flags at the tops of the poles in front of the platform fell apart and revealed two gilded models of the ships in which Columbus first sailed to American shores.

At the same moment also hundreds of flags of all nations and all colors were unfurled within sight of the platform. The largest was a great "Old Glory," which fell into graceful folds from the top of the centre staff in front of the stand. The roof of the Manufacturers' Building was gorgeous in red gonfalous, while the Agricultural Building was dressed in ensigns of orange and white.

It was a wonderful scene of transformation, and amid it all cannon continued to thunder and the crowd to cheer. It was fully ten minutes before the demonstration subsided. Then the band played "America" and the exercises were at an end. The Columbian Exposition was open to the nations of the world. It was precisely the hour of noon when President Cleveland touched the button and thus declared the opening an accomplished fact.

Statistics of the Fair.

The official time for closing the Fair was October 30th. The following are the official figures for the paid admissions to the Fair: May, 1,050,037; June 2,675,113; July, 2,760,263; August, 3,515,493; September, 4,659,871; October, 6,816,435; making 21,477,212. The total admissions on passes were 2,052,188, making a grand total of 23,529,400.

After every debt of the World's Fair was paid there remained \$1,000,000 to be distributed among the stockholders. The treasurer made this pleasant announcement on the closing day. The Exposition Company paid out \$30,558,849.01, or three times the amount the managers expected to spend when they commenced building the Fair. The gate receipts during the Exposition period proper were a little over \$10,000,000.

Up to the last day \$3,300,000 had been collected from concessionaries. The returns from those who held concession privileges was one of the big surprises of the Fair. Nobody was reckless enough to predict that that sum would be realized. The Paris Exposition received but \$80,000 from that source, while in 1876 the Centennial Exposition managers received \$1,200,000.

Gold in Alaska.

Much excitement was caused in 1897 by the discovery of gold in Alaska. It was found in large quantities in the Yukon district. On the Klondike it was found in August of the year preceding. The Canadian Government is sued new mining regulations, as it was anticipated that many persons in pursuit of the yellow metal would rush to this region. Both from the United States and Canada thousands of men started for the Klondike.

Many of them were ignorant of the country they were seeking, its severe climate in winter, the absence of the necessaries of life, and the consequence was that a vast amount of suffering resulted at Dawson City and other places.

In December, 1897, a steamer left the gold region and arrived at Victoria, B. C., August 29th, 1898, with thirty-five miners and two hundred thousand dol lars in gold. Nearly one million dollars in value arrived there on the 15th of July, 1899.

General Prosperity.

The extreme business depressio, that had lasted for several years gave way in 1898 and 1899 to great activity in all kinds of trade. Manufacturing interests revived, and some of the industries, especially iron and steel, received orders larger than ever before, and had great difficulty in meeting the demands made upon them. At the same time our exports were largely increased and the balance of trade with other countries was in our favor.

The Spanish-American War did not seriously affect the prosperity of the country, which was greater than that of any previous period of our history. This had a quieting effect upon the laboring classes, and there were few sharp conflicts between capital and labor, as in nearly all the industries wages were advanced.

CHAPTER VIII

The Spanish-American War.



NDER the leadership of a band of brave patriots an insurrection broke out in Cuba early in 1895. It was simply a continuation of

the struggle for independence which had been going on at intervals for many years. Cuban revolutionists were battling to throw off the yoke of Spain.

When our Congress was in session in the winter of 1897-98 Cuba's struggle for freedom occupied its attention more than any other topic. The Spanish General Weyler ordered all the inhabitants of Cuba who were suspected of sympathizing with the insurgents into the towns, where they were left to obtain the necessaries of life as best they could. This act, which was pronounced inhuman by the American people, resulted in the death of tens of thousands of men, women and children by starvation. Meanwhile, accurate reports of the appalling situation in Cuba were brought by several members of Congress who visited the island with a view to ascertaining the exact facts.

These reports so inflamed the Senate and House of Representatives that a number of resolutions were introduced demanding that belligerent rights should be granted to the Cubans, and further, that the United States should intervene with force of arms to end the war in Cuba, and secure the independence of the island. These resolutions,

which were referred to the committee on foreign relations, were indicative of the temper of Congress.

A profound sensation was created by the destruction of the United States battleship Maine in the harbor of Havana. The Maine was lying in harbor, having been sent to Cuba on a friendly visit. On the evening of February 15, 1898, a terrific explosion took place on board the ship, by which 266 sailors and officers lost their lives and the vessel was wrecked. The cause of the explosion was not apparent.

Destruction of the Maine.

The Government at Washington and the whole country were horrified at the destruction of one of our largest cruisers and the loss of so many of our brave sailors. The excitement throughout the country was intense. The chief interest in the Maine disaster now centered upon the cause of the explosion that so quickly sent her to the bottom of Hayana harbor.

A Naval Board of Inquiry went to Havana, and proceeded promptly to investigate the cause of the explosion that destroyed the battleship. The finding of the Court of Inquiry was reached after twenty-three days of continuous labor, and was submitted to Congress by President McKinley with a message in which he said:

"The conclusions of the Court are: That the loss of the Maine was not in any respect due to fault or negligence on the part of any of the officers or members of her crew. "That the ship was destroyed by the explosion of a submarine mine, which caused the partial explosion of two or more of her forward magazines; and

"That no evidence has been obtainable fixing the responsibility for the destruction of the Maine upon any person or persons.

"I have directed that the finding of the Court of Inquiry and the views of this Government thereon be communicated to the Government of her Majesty, the Queen Regent, and I do not permit myself to doubt that the sense of justice of the Spanish nation will dictate a course of action suggested by honor and the friendly relations of the two governments.

"It will be the duty of the Executive to advise the Congress of the result, and in the meantime deliberate consideration is invoked."

Message from the President.

Following the destruction of the battleship Maine, which profoundly stirred the whole country with indignation, President McKinley sent a message to Congress containing the following request: "I ask the Congress to authorize and empower the President to take measures to secure a full and final termination of hostilities between the Government of Spain and the people of Cuba, and to secure in the island the establishment of a stable government capable of maintaining order and observing its international obligations, ensuring peace and tranquillity and the security of its citizens as well as our own, and to use the military and naval forces of the United States as may be necessary for these purposes."

Congress debated a week over the

recommendations contained in the President's message, and on April 18th both Houses united in passing a series of resolutions calling for the intervention of the United States to compel Spain to withdrawher forces from Cuba, and thus permit the authorities at Washington to provide the Island with a free and independent government. The demand contained in the resolutions was sent to the Spanish Minister at Washington on April 20th, who at once called for his passports and left for Canada.

On the same date the ultimatum of our Government was sent to United States Minister Woodford, at Madrid, who was curtly handed his passports before he had an opportunity of formally presenting the document. These transactions involved a virtual declaration of war, although Congress did not formally declare that war actually existed until April 25th, dating the time back to the 21st.

The War Begins.

The North Atlantic Squadron was immediately ordered to blockade the Cuban ports, and on April 22d proceeded to carry out the order. The next day President McKinley promulgated a resolution calling for 125,000 volunteers. On the same date Morro Castle, commanding the harbor of Havana, fired on the United States flagship New York, but without doing damage. Subsequent events comprised the capture of a number of Spanish vessels by Admiral Sampson's squadron.

Stirring news from our Asiatic fleet was soon received. On May 1st Admiral Dewey destroyed the Spanish squadron in the harbor of Manila, Philippine Islands, capturing the vessels and inflicting a heavy loss on the enemy in killed | fleet, steaming slowly up from Cavite, and wounded.

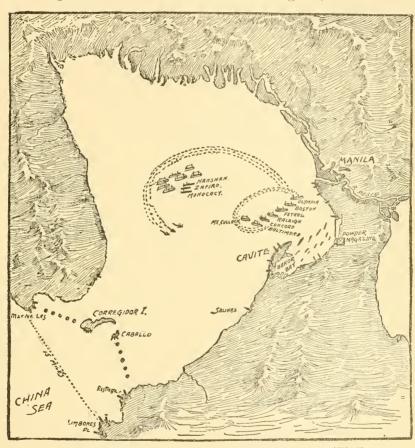
The American vessels were the Olympia, 5,800 tons, a swift commerce destroyer, carrying four terrible eight-inch guns and ten deadly five-inch quickfirers; the Baltimore scarcely less formidable than the Olympia, with four

eight-inch guns and six six-inch rapidfirers; the Boston, smaller than the Olympia and Baltimore, but still a real and powerful floating fort, with her two eight-inch guns and her six six-inch rapid-firers; the Raleigh, similar to the Boston, with one six-inch and ten fiveinch guns; the Concord, with six six-inch guns; the gunboat Petrel, with five sixinch guns. To

the rear of

came several shots at the American fleet The two duelists were now face to face.

The Spanish ships were of older patterns, rather than smaller, and were far more numerous. There were the Reina Cristina, of 3,000 tons, with six six-inch and two three-inch guns; the Castilla,



MANILA HARBOR-SCENE OF THE GREAT BATTLE.

these the transport ships, with coal, ammunition and accommodations for wounded.

On came the American fleet until it was within about three miles of Manila, and then a Spanish gun on the battery at the end of the Mole spoke; but the shot fell short. Then from the Spanish with four six-inch guns; the smaller cruisers Velasco, Don Juan de Austria and Don Antonio de Ulloa, besides ten gunboats. Then there were the batteries on shore all along the low peninsula.

To get the full effect of all of these guns the Spaniards formed so that the Americans would have to face not only

all the guns afloat, but also all the guns on shore at Cavite, while from the rear the strong batteries of Manila could, perhaps, send aiding shots. When the American manœuverings brought their ships within range, at about 6.45, the real duel began. The Spanish fleet stood ready, flanked by the Cavite batteries on the south.

The American fleet began to steam languidly to and fro. Suddenly there were one or two sharp cracks, and then a succession of deafening roars, and then one long, reverberating roar, that boomed and bellowed from shore to shore. A huge cloud of smoke lay close upon the waters, and around it was a penumbra of thick haze.

Floating Batteries.

Through this the American ships could be seen moving, now slowly, now more rapidly, flames shooting from their sides, and answering flames leaping from the Spanish ships and land batteries, while now and then from the direction of Manila came hollow rumbles as the big guns there were discharged, more from eagerness to take part than from the hope of lending effective aid.

It was impossible to see from shore the effect of many of the shots, but from the fact that the American ships were alternately advancing and retreating in the course of their manœuverings, the Spaniards on shore got the impression that the Yankees were being beaten. When the ships were again seen, the Reina Cristina was wrapped in flames. On her decks sailors, Spaniards and natives, were rushing frantically about. The Isla de Cuba came near, and part of the Reina Cristina's crew—perhaps all that were still alive—and the Spanish

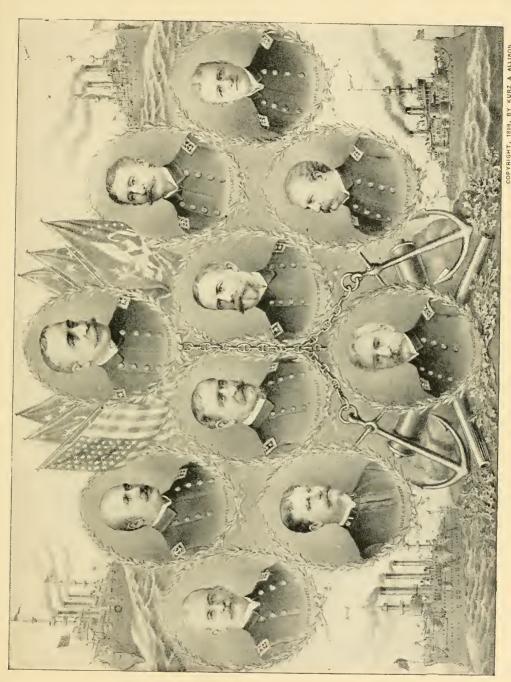
Admiral went aboard her, but hardly were they aboard when she, too, burst into flames.

Confusion now reigned throughout the Spanish fleet. On every vessel the decks were slippery with blood and the air filled with the shrieks and groans of the Spaniards. The native sailors rushed about in a frenzy of rage rather than terror. The Americans were seemingly calm and cool, and still in good order they pressed their advantage. In fact, they pushed on too closely, for now the fire from the Cavite batteries became effective.

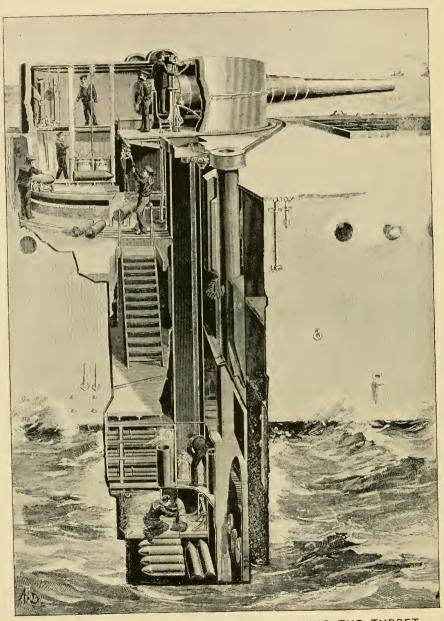
Blown Skyward.

At this juncture the Don Juan de Austria became a centre of interest. She had been in the very front of battle and received, perhaps, more of the American shots than any other ship. Admiral Montojo, on the burning Isla de Cuba, threw up his arms with a gesture of despair as a heavy roar came from the Don Juan de Austria and part of her deck flew up in the air, taking with it scores of dead, dying and mangled. A shot had penetrated one of her magazines. She was ruined and sinking, but her crew refused to leave her. Weeping, cursing, praying and firing madly and blindly they went down with her, and as the Don Juan de Austria went down the Castilla burst into flames.

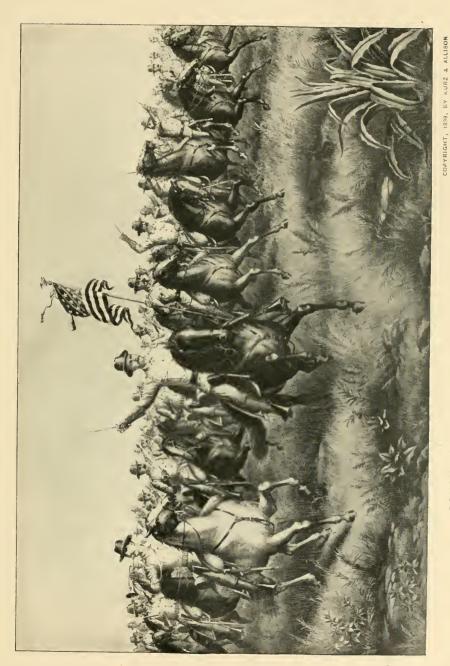
The remainder of the Spanish fleet now turned and fled down the long, narrow inlet behind Cavite. Several of the gun-boats were run ashore, others fled up a small creek and were grounded there. The guns of Cavite kept on thundering, and the Americans, pressing their advantage no further, drew off. As they steamed away toward their



OUR CELEBRATED AMERICAN NAVAL HEROES



SECTIONAL VIEW OF A BATTLESHIP, SHOWING THE TURRET AND AMMUNITION HOIST



ROUGH RIDERS-COLONEL ROOSEVELT COMMANDER

THIS FAMOUS REGIMENT FOUGHT WITH GREAT BRAVERY IN THE BATTLES AROUND SANTIAGO, JUNE 24TH TO JULY 1ST, 1898



M. GUIGLIELMO MARCONI
DISCOVERER AND INVENTOR OF THE WIRELESS TELEGRAPH

waiting transports the Spaniards went wild with joy.

They thought that in spite of outward appearances the American fleet was crippled, and that as it would be unable to escape from the harbor it would fall into their hands. This was telegraphed up to Manila, and soon to Madrid, where it filled the Ministry with momentary delight; but before the Ministers at Madrid had read the false news, the American fleet, with decks again cleared and with fresh supplies of ammunition was steaming back toward Cavite.

Dewey Made Admiral.

This second engagement was short. The last Spanish ship was soon grounded or sunk. The American guns were now trained on Cavite, and one ship after another steamed along pouring in a deadly fire. At 11.30 the batteries at Cavite ceased to answer, and the American fleet with ringing cheers from its exhausted, but triumphant crews steamed jubilantly back to the transport ships. And to the long list of splendid naval victories beginning with the Revolution was added the glorious victory of Manila.

In honor of his distinguished service Commodore Dewey was raised to the rank of Admiral, and Congress passed a series of resolutions thanking him and his men for services rendered their country, and voted a medal to every man of the fleet. Dewey's victory was gained without the loss of a single life.

On May 11th Ensign Bagley, of the torpedo boat Winslow, and five men were killed, and five others were wounded in Cardenas harbor, on the northern coast of Cuba, in an engagement with

Spanish gunboats. The Americans displayed great bravery in the face of danger, the action of the United States gunboat Hudson being especially notable in going to the rescue of the Winslow, and towing her out of range of the enemy's fire. Ensign Bagley was the first to lose his life in the war.

It was known that Spain had sent a formidable fleet under Admiral Cervera to operate in the waters around Cuba, but for several weeks the officers of our North Atlantic Squadron were unable to locate the Spanish ships, or tell their exact destination. On May 19th the long suspense occasioned by the difficulty of ascertaining what Admiral Cervera intended to do with his fleet was over, and it was definitely known that his vessels were entraped in the harbor of Santiago.

Hurrying Troops Forward.

The Government resolved to send troops at once to that point to aid the fleet in capturing the town. While it was known that the Spanish vessels were inside the harbor of Santiago it was considered impossible for our battleships to enter the harbor on account of mines which had been planted, and the formidable attack sure to be made by batteries on shore.

The entrance to the harbor of Santiago is very narrow, and vessels are compelled at one point to go through a channel not much over three hundred feet wide. Here occurred on the morning of June 3d one of the most gallant acts recorded in the annals of naval warfare. Lieutenant Hobson, naval constructor, on the flagship of Admiral Sampson, conceived the plan of blocking this narrow entrance by sinking the

collier Merrimac, thus "bottling up" Cervera and his fleet.

When it became known that he was about to enter upon this daring undertaking and would need a few brave spirits to aid him, every man apparently of the whole fleet was anxious to form one of the party. Only six, however, were chosen and these were men as brave and adventurous as Hobson himself.

The collier was prepared for sinking, and early in the morning about daylight she started on her mission, accompanied by a launch manned by Ensign Powell and six other men, who were to rescue the crew of the Merrimac when she went down. Thousands of eyes from our ships were strained to watch the progress of the undertaking. Suddenly the Spanish batteries on shore opened fire on the daring craft.

Fate of the Gallant Crew

Lying closer in than the warships, Powell had seen the firing when the Merrimac and her crew, then well inside Morro Castle, were probably first discovered by the Spaniards. He also heard an explosion, which may have been caused by Hobson's torpedoes. The Ensign was not sure. He waited vainly, hoping to rescue the heroes of the Merrimac, until he was shelled out by the forts.

The work, however, was done. The big vessel had been swung across the narrow entrance to the harbor, the torpedoes had been fired, the explosion had come, the great collier was sinking at just the right point; and her gallant crew, having jumped into the water to save their lives, were taken on board the flagship of the Spanish Admiral,

who praised their bravery, and sent an officer under flag of truce to assure Admiral Sampson that the heroic band was safe and would be well cared for. Spanish chivalry was forced to admiration.

By the end of June the army that our Government had ordered to Cuba had arrived, General Shafter being in command. The number of troops was about 16,000, including officers, and sailed from Tampa, Florida, June 13th, arriving at Santiago on the 20th.

Rough Riders in Battle.

It was not long after General Shafter's army landed before the United States troops were engaged in active service and had a sharp conflict with the enemy. The initial fight of Colonel Wood's famous regiment, known as the Rough Riders, and the troopers of the First and Tenth regular cavalry was at La Ouasina. That it did not end in the complete slaughter of the Americans was not due to any miscalculation in the plan of the Spaniards, for all the advantages of position were in their favor. For an hour and a half our troops held their ground under a perfect storm of bullets from the front and sides, and then Colonel Wood, at the right, and Lieutenant-Colonel Roosevelt at the left, led a charge which turned the tide of battle and sent the enemy flying over the hills toward Santiago.

The American officers showed the utmost energy in preparing for the attack on Santiago; by July 1st everything was in readiness, and General Shafter ordered a forward movement with a view of investing and capturing the town. The advance was made in two divisions, the left storming the works at San Juan.

Our torces in this assault were composed of the Rough Riders and the First, Third, Sixth, Ninth and Tenth dismounted cavalry. Catching the enthusiasm and boldness of the Rough Riders, these men rushed against the San Juan defences with a fury that was irresistible.

Their fierce assault was met by the Spaniards with a stubbornness born of desperation. Hour after hour the troops on both sides fought fiercely. In the early morning the Rough Riders met with a similar, though less costly, experience to the one they had at La Ouasina just a week before. They found themselves a target for a terrific Spanish fire, to resist which for a time was the work of madmen. But the Rough Riders did not flinch. Fighting like demons, they held their ground tenaciously, now pressing forward a few feet, then falling back, under the enemy's fire, to the position they held a few moments before.

Cowboys and "Dandies."

The Spaniards were no match for the Roosevelt fighters, however, and, as had been the case at La Quasina, the Western cowboys and Eastern "dandies" hammered the enemy from their path. Straight ahead they advanced, until by noon they were well along toward San Juan, the capture of which was their immediate object.

There was terrible fighting about the heights during the next two hours. While the Rough Riders were playing such havoc in the enemy's lines, the First, Third, Sixth, Ninth and Tenth cavalry gallantly pressed forward to right and left. Before the afternoon was far gone these organizations made one grand rush all along the line, capturing the San Juan fortifications, and

sending the enemy in mad haste off toward Santiago. It was but three o'clock when these troops were able to send word to General Shafter that they had taken possession of the position he had given them a day to capture.

Carried by Storm.

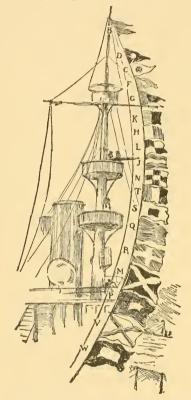
On the right General Lawton's division, supported by Van Horne's brigade, under command temporarily of Colonel Ludlow, of the Engineers, drove the enemy from in front of Cauey, forcing them back into the village. There the Spaniards for a time were able to hold their own, but early in the afternoon the American troops stormed the village defences, driving the enemy out and taking possession of the place. Gaining the direct road into Santiago, they established their lines within three-quarters of a mile of the city at sunset.

General Shafter's advance against the city of Santiago was resumed soon after daybreak on the morning of July 2d. The American troops renewed the attack on the Spanish defences with impetuous enthusiasm. They were not daunted by the heavy losses sustained in the first day's fighting. Inspired by the great advantages they had gained on the preceding day, the American troops were eager to make the final assault on the city itself. Their advance had been an uninterrupted series of successes, they having forced the Spaniards to retreat from each new position as fast as it had been taken. Admiral Sampson, with his entire fleet, joined in the attack.

The battles before the intrenchments around Santiago resulted in advantage to General Shafter's army. Gradually he approached the city, holding every

foot of ground gained. In the fighting of July 2d, the Spanish were forced back into the town, their commanding general was wounded, and the day closed with the certainty that soon our flag would float over Santiago.

The fleet of Admiral Cervera had long been shut up in the harbor, and during the two days' fighting gave effective aid



INTERNATIONAL SIGNAL CODE.

to the Spanish infantry by throwing shells into the ranks of the Americans. On the morning of July 3d, another great naval victory was added to the successes of the American arms, a victory no less complete and memorable than that achieved by Dewey at Manila.

Admiral Cervera's fleet, consisting of the armored cruisers Cristobal Colon, Almirante Oquendo, Infanta Maria Teresa, and Vizcaya, and two torpedo-boat destroyers, the Furor and the Pluton, which had been held in the harbor of Santiago de Cuba for six weeks by the combined squadrons of Rear-Admirals Sampson and Schley, was sent to the bottom of the Caribbean Sea off the southern coast of Cuba.

The Spanish admiral was made a prisoner of war on the auxiliary gunboat Gloucester, and 1,000 to 1,500 other Spanish officers and sailors, all who escaped the frightful carnage caused by the shells from the American warships, were also made prisoners of war by the United States navy. The American victory was complete, and the American vessels were practically untouched, and only one man was killed, though the ships were subjected to the heavy fire of the Spaniards all the time the battle lasted.

The Admiral's Bravery.

Admiral Cervera made as gallant a dash for liberty and for the preservation of the ships as has ever occurred in the history of naval warfare. In the face of overwhelming odds, with nothing before him but inevitable destruction or surrender if he remained any longer in the trap in which the American fleet held him, he made a bold dash from the harbor at the time the Americans least expected him to do so, and, fighting every inch of his way, even when his ship was ablaze and sinking, he tried to escape the doom which was written on the muzzle of every American gun trained upon his vessels.

One after another of the Spanish ships became the victims of the awful rain of shells which the American battleships, cruisers and gun-boats poured upon them, and two hours after the first of the fleet had started out of Santiago harbor three cruisers and two torpedoboat destroyers were lying on the shore ten to fifteen miles west of Morro Castle, pounding to pieces, smoke and flame pouring from every part of them and covering the entire coast line with a mist which could be seen for miles.

Heavy explosions of ammunition occurred every few minutes, sending curls of dense white smoke a hundred feet in the air, and causing a shower of broken iron and steel to fall in the water on every side. The bluffs on the coast line echoed with the roar of every explosion, and the Spanish vessels sank deeper and deeper into the sand, or else the rocks ground their hulls to pieces as they rolled or pitched forward or sideways with every wave that washed upon them from the open sea.

Total Destruction.

Admiral Cervera escaped to the shore in a boat sent by the Gloucester to the assistance of the Infanta Maria Teresa, and as soon as he touched the beach he surrendered himself and his command to Lieutenant Morton, and asked to be taken on board the Gloucester, which was the only American vessel near him at the time, with several of his officers, including the captain of the flagship. The Spanish admiral, who was wounded in the arm, was taken to the Gloucester, and was received at her gangway by her commander, Lieutenant Richard Wainwright, who grasped the hand of the gray-bearded admiral and said to him:

"I congratulate you, sir, upon having made as gallant a fight as was ever witnessed on the sea."

The only casualties in the American

fleet were one man killed and two wounded on the Brooklyn. A large number of the Spanish wounded were removed to the American ships.

General Toral, commander of the Spanish forces at Santiago, was summoned to surrender, and after much parleying yielded to General Shafter's demands on July 14th. The formal surrender took place on the 17th, and the American flag was hoisted over the city. By this victory 25,000 Spanish troops and officers in the province of Santiago became prisoners of war, and through the generosity of our government were afterwards sent back to Spain.

It was understood that our Government would begin military operations for the purpose of capturing the island of Porto Rico immediately after the fall of Santiago, and on July 21st an expedition under General Miles, Commander-in-chief of the American army, accompanied by transports and a naval convoy, sailed from Siboney on the southern coast of Cuba.

Our Army in Porto Rico.

General Miles landed his forces on July 25th at Guanica, Porto Rico. He encountered but little opposition, although there were several sharp skirmishes with the Spanish troops who were occupying various points as garrisons. On July 27th Ponce surrendered to General Miles, and on the 28th the capitulation was formally effected.

Our troops advanced northward across the island and soon occupied the important town of San Juan. Thus the island was peacefully subdued, and with but little bloodshed. A military government was afterwards established, which was intended to pave the way for a civil government that should promote the peace and welfare of the inhabitants.

The Department of State at Washington, on the afternoon of August 2d, issued a statement announcing officially the President's terms of peace, which were handed to the French Ambassador Cambon, acting representative of the Spanish government at Washington. They were that Spanish sovereignty must be forever relinquished in the Western Indies; that the United States should have a coaling station in the Ladrones, and that this country would occupy Manila's bay and harbor, as well as the city, pending the determination of the control, disposition and government of the Philippines.

The announcement on August 7th, from Madrid, that the Spanish Ministry had formally decided to accept the proposition of the United States for a peace convention relieved the anxiety that was felt for a definite decision.

Attack on Manila.

Messages were immediately sent to all army and navy commanders announcing that the war was ended and ordering them to cease hostilities. Before the message reached Manila Admiral Dewey and General Merritt resolved to capture the city. The warships bombarded the forts on August 13th, and the land forces at the same time made an attack. After a spirited resistance by the Spaniards they surrendered, knowing it was useless to longer resist.

The fortifications and shore defences and part of the city itself were destroyed by American shot and shell during a terrific bombardment of two hours by the eight ships of Admiral Dewey's fleet. The Americans killed lost their lives in storming the Spanish trenches, when they swept everything before them like a whirlwind.

At 9.30 o'clock the signal to open fire fluttered from the signal lines of the Olympia. The flags were scarcely set when there was a roar from the big guns of the flagship herself. Instantly all the other vessels opened and a shower of steel missiles sped toward the doomed city. At the same time along the line of the American intrenchments the field guns opened on the Spanish position, and the American infantry were massed in the intrenchments ready for the final assault.

Enemy Swept Like Chaff.

With a cheer the Americans sprang from their trenches and dashed for the Spanish earthworks. The First Colorado Volunteers were in the van. A deadly fire was poured in from the heights occupied by the Spaniards, and it was this that caused the American losses. But the men never hesitated. They swept the enemy from the outer line of intrencliments to the second line of defence. This was at once attacked. and from there the Spaniards were driven into the walled city. Then the Spanish commander saw that further resistance was useless, and he sent up a white flag. The bombardment was at once stopped, and soon afterward the American forces entered the city. General Merritt assumed command and temporarily restored the civil laws.

On August 24th it was announced that the following American Peace Commissioners to settle the future of the Philippine Islands had been selected by President McKinley: William R. Day, of Canton, Ohio, Secretary of State; Cushman K. Davis, United States Senator from Minnesota, Chairman of the Foreign Relations Committee; William P. Frye, United States Senator from Maine, member of the Foreign Relations Committee; Whitelaw Reid, of New York, for several years American Ambassador to the French Republic, and George Gray, United States Senator from Delaware. The sessions

of the Peace Commission were to be held in Paris, commencing not later than October 1st, and continuing until an agreement was reached.

The Commissioners met in Paris at the appointed time, and at once began their labors. Reports from time to time indicated that serious disagreements had developed, and it was even rumored that it would be impossible to reach an agreement that would satisfy both parties. The result, however, proved the contrary, and on the 28th of

November, 1898, they reached an agreement respecting the terms for

establishing peace between the two nations.

The Spanish Commissioners were compelled to yield to the force of circumstances, to realize the hopelessness of further opposition and to accept the mevitable. In other words, the title of the United States to the possession of a vast colonial territory was confirmed and ratified at the meeting of the Joint Commission in Paris on the above date.

This territory includes Porto Rico, the Island of Guam, and the Philippine archipelago, considered in its broadest geographical sense—that is, comprising the Sulu Islands. At the same time

the Spanish sovereignty over Cuba was also relinquished.

The treaty of peace was signed at 8.45 on the evening of December 10, 1898. The treaty consisted of seventeen articles, it having been found advisable to subdivide some of the articles in the draft agreed upon at the last meeting. The

illiam R. Day

EUGENIO MONTERO RIOS. B. DE ABARAZUZA. J. DE GARNICA. W. R. DE VILLI-URRUTIA. RAFAEL CERERO.

signatures of the American Commissioners and the names of the Commissioners acting for Spain were appended.

The treaty of peace was ratified in the executive session of the United States Senate, February 6th, by a vote of 57 to 27, the supporters of the treaty mustering but a single vote more than the necessary two-thirds. There was no doubt whatever that the Spanish Cortes would ratify the treaty, and the war with Spain was therefore concluded.

The long agitation in Congress and throughout the country concerning the peace treaty was over, and the way was prepared for Congress to adopt such measures as it might see fit for the future government of the Philippine Islands. The debate in the Senate had been very able, and for some time the result was in doubt. Efforts were made to pass a resolution declaring that it was not the policy of the United States to acquire possession of the Islands and make them a part of the territory of the United States.

The insurgent army of Aguinaldo, which had resolutely maintained its position near Manila after the town was surrendered by the Spaniards to the American soldiers and sailors, made a fierce attack on the American lines on the evening of February 4, 1899.

Insurgents Driven Back.

Defeated in a desperate effort to break through the American lines and enter the city of Manila, the insurgent forces, after fourteen hours of continuous fighting, were driven from the villages of Santa Anna, Paco and Santa Mesa. They were compelled to retreat to a position quite a distance further out in the suburbs than the one they held before attacking the city.

The losses of the insurgents were heavy, the American troops having gone into the engagement with great enthusiasm and determination. They made the streets of the city ring with their cheers when they were notified of the attack and were ordered to advance. Several of the vessels in Admiral Dew-

ey's squadron participated in the fight, firing on the natives in Malate and Caloocan, and driving them inland from both of these places and inflicting heavy losses.

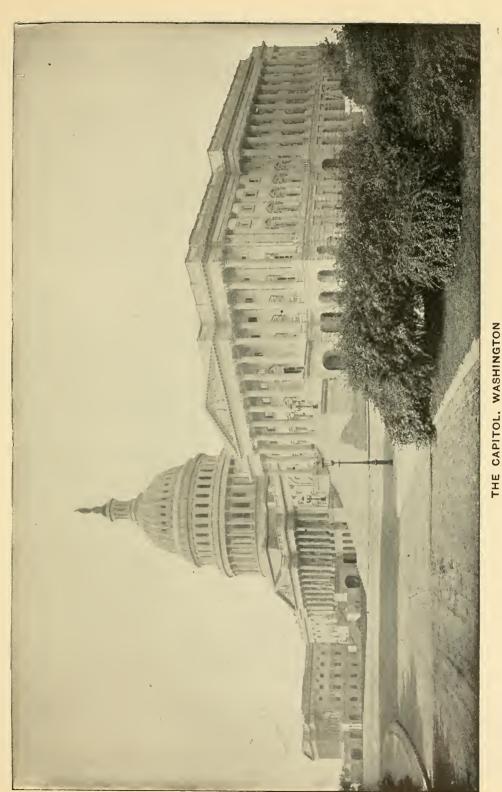
Aguinaldo's forces were completely routed and driven from six to ten miles beyond the positions they occupied when the battle began. On February 10th a force of 6,000 insurgents that had gathered at Caloocan was attacked by the Americans and defeated with heavy loss. On February 11th Iloilo was captured by General Miller and the force under his command, aided by the warships Petrel and Baltimore. No casualties resulted to our troops.

Peace Treaty Signed.

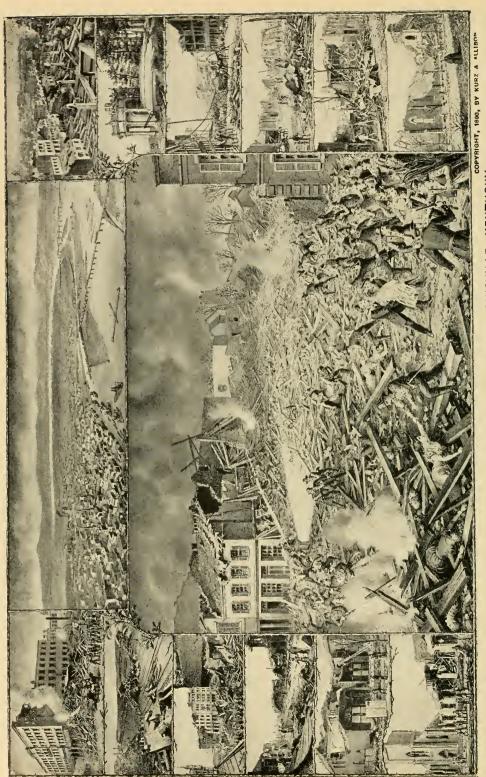
During February Negros and Cebu, two important islands of the Philippine group, announced that they were ready to submit to the authority of the United States.

On Friday, March 17th, the Queen Regent of Spain signed the treaty of peace, which was forwarded to the French Ambassador at Washington, M. Jules Cambon, for exchange with the one signed by President McKinley.

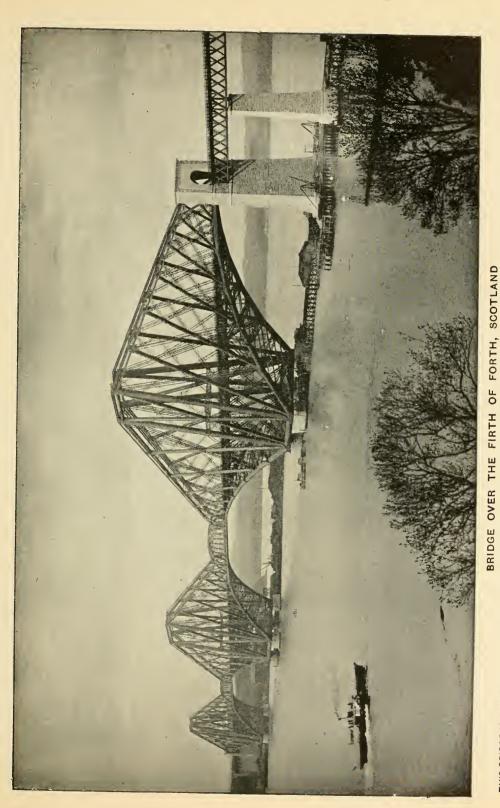
Malolos, the insurgent capital, was captured on the morning of March 31st by the American troops, after a hot fight. The most brilliant exploit and the winning of the greatest American victory in the battles around Manila occurred on the 27th. The taking of the bridge over the Rio Grande at Calumpit was a deed of astonishing daring. It was the most strongly defended position held by the insurgents. Located on the north shore of the Rio Grande, opposite Calumpit, it is the most valuable strategic point in Luzon. The fact



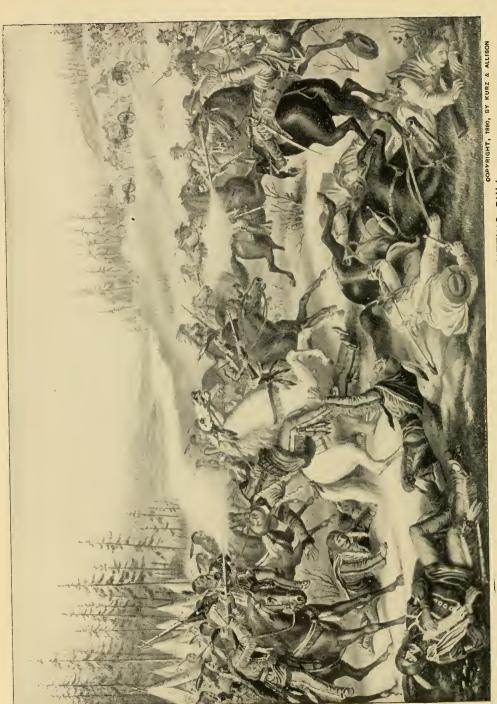
THE ORIGINAL BUILDING WAS COMMENCED IN 1793, AND THE WINGS WERE FINISHED IN 1813. THE INTERIOR WAS DESTROYED BY FIRE IN 1814, ANY MAMEDIATELY REBUILT. THE STATUE OF LIBERTY, WHICH SURMOUNTS THE IRON DOME, IS 288 FEET FROW THE GROUND



MORE THAN A HUNDRED PERSONS WERE HURLED TO DEATH IN A MOMENT ON THE VIGHT OF MARCH 27TH, 1990 THE GREAT CYCLONE, TORNADO AND FIRE AT LOUISVILLE, KENTUCKY



THIS BRIDGE IS CONSTRUCTED ON THE PRINCIPLE OF THE CANTILEVER BRIDGE AND CONSISTS OF TWO MAIN SPANS OF 1700 FEET. THE TOTAL LENGTH EACH OF THE OF THE VIADUCT, INCLUDING PIERS, IS 8296 FEET. IT IS ONE OF THE GREATEST TRIUMPHS OF ENGINEERING SKILL IN MODERN TIMES



11 WAS CHIEF OF THE SIOUX INDIANS AND WAS INSTRUMENTAL IN THE SLAUGHTER OF GENERAL CUSTER AND HIS ENTIRE COMMAND
AT LITTLE HORN RIVER IN JUNE, 1876. IN 1890 HE WAS CAPTURED AND SHOT BY A BODY OF INDIAN POLICE CAPTURE AND DEATH OF THE INDIAN CHIEF SITTING BULL

that it was guarded by the most trustworthy and best disciplined regiments of General Aguinaldo made the feat more noteworthy. Army officers said the daring displayed by the American troops was almost unparalleled in the annals of modern warfare.

It was a notable day for the Twentieth Regiment of Kansas Volunteers, commanded by Colonel Funston. One hundred and twenty men belonging to that regiment crossed the river in the face of a deadly fire from 3,000 insurgent Mausers. This torrent of bullets was augmented by a fusillade of a Maxim gun, of which the insurgents had obtained possession. It was in this battle that Colonel Funston made himself famous by dashing forward with only nine men and charging the trenches which were manned by hundreds of insurgents. They were thrown into a panic by this daring feat and put to rout.

Desperate Resistance.

General Lawton's forces had an allday battle with the insurgents at Las Pinas on June 13th. He called out his whole force of 3,000, and at 5 o'clock was only able to push the insurgents back 500 yards to the Zapote River, where they were intrenched. The insurgents resisted desperately and aggressively. They attempted to turn the left flank of the American troops, but failed. By this desperate battle the insurgents lost a district which they superstitiously believed to be invulnerable against any attack of their enemies, it having been the scene of many former victories over the Spaniards.

The greatest public demonstration in honor of any individual in the history of our country took place in New York upon the return of Admiral Dewey from his great victory in the harbor of Manila. The Admiral arrived on the 26th of September, 1899, and was warmly greeted by city and state officials. As his flagship, the Olympia, came into the harbor, she was received with noisy demonstrations, and a multitude of people, on land and water, testified in every possible way, their admiration for Admiral Dewey.

Grand Naval Spectacle.

On the 29th, there was a naval parade that was participated in by the North Atlantic squadron, and a vast number of vessels all gaily decked. It was the most imposing naval spectacle ever witnessed on this continent. Hundreds of thousands of interested spectators lined the shores, from the Battery to Grant's tomb on the Hudson, and cheered our battleships and other naval vessels.

On the 30th there was a land parade in which 30,000 soldiers and civilians participated. Admiral Dewey was escorted first to the City Hall where he was presented by the Municipal Government with a loving cup in the presence of a vast throng of people. Thence he was escorted to Riverside Drive, and from there made his way through a vast concourse of applauding people to the arch erected in his honor at Twenty-fourth Street and Fifth Avenue, where he reviewed the parade. Many state governors, their escorts and a large number of city and state officials were in the parade, and all attempts to describe the enthusiasm of the populace would fail.

It was a memorable day in the history of the United States, as it showed the patriotic feeling of the people and

their admiration for the famous hero of the Spanish war.

From New York the Admiral made his way to Washington, where he again met with a most cordial reception, and on the 3d of October was presented with a sword that had been voted in his honor by Congress. An immense concourse of people surrounded the Capitol, on the steps of which the Admiral took his stand and was welcomed in an eloquent speech by Hon. John D. Long, Secretary of the Navy.

A Sword for the Admiral.

President McKinley then presented the Admiral with the diamond sword He made a brief and graceful reply. thanking Congress and the American people for the distinguished consideration that had been shown him. Other receptions to the Admiral followed, all of which showed the appreciation of the public and gave evidence of the very high esteem in which he was held for his bravery, his adherence to duty and his gallant exploit at Manila.

From Washington the Admiral went to his native town of Montpelier, Vermont, receiving on the way a continuous ovation. The celebration lasted two days and drew people from all parts of the Green Mountain State. On October 13th Dewey laid the corner-stone of a new building to be named Dewey Hall in connection with the military school which he attended in early life. On the same day he arrived in Boston, where the town was gayly decorated and great preparations were made for his reception. The demonstration here was no less cordial and unanimous than elsewhere.

The following day 25,000 school chil-

dren welcomed the Admiral on the Common with the waving of flags and the singing of patriotic songs. The enthusiasm which greeted him upon his arrival at the City Hall equaled that which he received on the Common. His carriage drew up at the entrance to the City Hall, and the Admiral at once ascended the stand erected in front of the building, which was decorated in bunting and evergreens.

Boston's Hearty Welcome.

By the stand at City Hall 280 trained singers from the Handel and Haydn Society were seated. As the Admiral and his party appeared upon the stand the society sang, "See the Conquering Hero Comes," to which the Admiral listened, chapeau in hand, and at the close of which he stepped forward and acknowledged the reception with repeated bows. The action called forth a great wave of cheers, which Mayor Ouincy, arising, checked with uplifted hand. The Mayor then delivered the address of presentation to the distinguished guest, who remained seated, at the Mayor's suggestion. In his address Mayor Quincy characterized the battle of Manila Bay as "the greatest since Trafalgar."

At the State House the Admiral and Governor Wolcott and staff left the line and took up a position on the State House steps, where they remained while the parade passed in review on its way to the Common, where the colors carried by those regiments which were in the Spanish War, were formally surrendered to the State with impressive ceremonies. The exercises were viewed by Admiral Dewey, with Governor Wolcott and staff.

PART II.

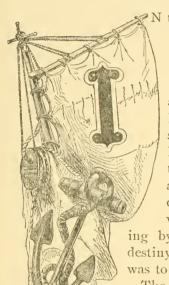
EUROPEAN AND OTHER COUNTRIES

IN THE

NINETEENTH CENTURY.

CHAPTER IX.

Great Events in English History.



N the beginning of the century Europe was in a state of turmoil and great upleaval. The star of Napoleon was in the ascendant and tremendous forces were gather-

ing by which the destiny of nations was to be decided.

The return of Napoleon from Egypt to France enabled England to finish the work of expelling the French from

the East. On the 21st of March, 1801, Sir Ralph Abercrombie inflicted a crushing defeat upon the French before Alexandria, and compelled them to evacuate Egypt. By this success England secured her possessions in India, and prevented Turkey from becoming a dependency of France. Malta had already been wrested from the French,

and England was now supreme in the Mediterranean. Her danger was very great, however. The treaty of Luneville had left her alone in the struggle with France, and a league of the northern powers, with Russia at its head, was determined to compel her to abandon her claim to the right to seize neutral vessels carrying contraband of war.

Great Naval Victory.

In April, 1801, England struck a terrible blow at this coalition. A British fleet attacked Copenhagen, and after a desperate struggle silenced the Danish forts and captured the larger part of the Danish fleet. Denmark was forced to withdraw from the northern coalition, and the league was soon broken up by the death of the Czar of Russia. All parties were now anxious for a cessation of hostilities, and in March, 1802, the peace of Amiens was concluded.

By this treaty France agreed to withdraw from Italy and leave the newlyestablished republics of that country to work out their own destiny. England, on her part, agreed to give up all her conquests except Ceylon, and to restore Malta to the Knights of St. John. This treaty was not satisfactory to England. and would not have been made under the Pitt cabinet; but that great minister had withdrawn from the government in February, 1801, and had been succeeded by Mr. Addington, the Speaker of the House of Commons, a very dull man. No one believed it possible for 'he peace to be of long continuance, and, as a matter of fact, war broke out again in May, 1803.

Napoleon seized Hanover, and collected a large army and a fleet of transports and boats at Boulogne for the invasion of England. The British government prepared to meet the threatened invasion, and at the same time sought to organize a new coalition against France on the continent. Nearly 400,000 volunteers enrolled themselves for the defence of England.

Pitt Again in Power.

In 1804 the Addington ministry resigned, and the peril of the country forced the king to recall William Pitt to power. He was greatly broken in health, and the obstinacy of the king prevented him from receiving the cooperation of Fox, Lord Grenville, Wyndham or Dundas, whom he was more anxious to include in his cabinet. Still he addressed himself to the task before him with his old courage.

In 1805 Napoleon, who had in the meantime become Emperor of the French, determined to begin the invasion of England, and conceived a skillful plan for dividing the British fleet and concentrating the entire French navy in the Channel. By his alliance with Spain he had obtained the services of the Spanish fleet, and with this powerful armament he felt sure of protecting the passage of the Channel by

his army. The French fleet, under Admiral Villeneuve, sailed from Toulon, and effected a junction with the Spanish fleet at Corunna. Villeneuve then sailed to the westward, as if going to the West Indies, followed by the English fleet under Lord Nelson. Then suddenly putting about, he eluded the English and sailed for Brest, intending to unite with the French squadron at that port and crush the English Channel fleet.

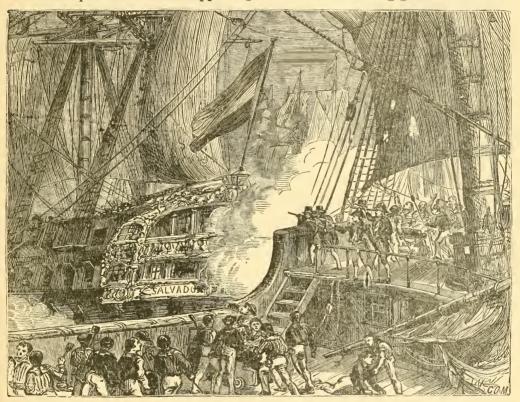
Nelson, upon the disappearance of the French, returned to the coast of Spain and encountered the combined French and Spanish fleets off Cape Trafalgar, on the 21st of October, 1805. He at once attacked them, signaling to the fleet his memorable order of the day, "England expects every man to do his duty." At the moment of victory he was shot down by a rifleman, and died soon after. The sacrifice of England's greatest sailor was not in vain; the French and Spanish fleets were annihilated.

Napoleon's Brilliant Successes.

Before this great victory had rendered the execution of his attempt upon England impossible, Napoleon had been forced to abandon his plan of invasion by the formation of the coalition of Austria, Russia, and England, and the gathering of the Austro-Russian army in the East. Breaking up his camp at Boulogne, he moved his army swiftly across France into Germany, and entered upon his memorable campaign of Ulm and Austerlitz. The shock of Napoleon's victory at Austerlitz was fatal to Pitt, who had long been failing in health. He died on the 23d of January, 1806, at the early are of fortyseven, a victim to his extraordinary labors. His loss was felt to be irreparable.

The policy of Pitt, to save Europe from the ambition of France, was vigorously carried out by Mr. Fox, his successor. All internal questions were subordinated to this great end, and for a while all parties united in supporting

which was to draw upon her the condemnation of the world. The Grenville ministry, which succeeded the cabinet of Fox, declared the whole coast of Europe occupied by France and her allies, from Dantzic to Trieste, to be in a state of blockade. It was not possible for even "the mistress of the seas" to maintain such a gigantic blockade.



BATTLE OF CAPE TRAFALGAR

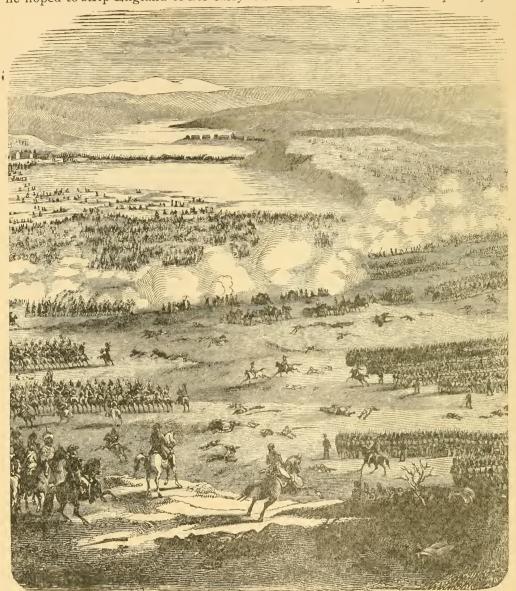
the government in its efforts to accomplish it. In September, 1806, Fox followed Pitt to the grave, and on the 14th of October the decisive victory of Jena laid Prussia and all north Germany at Napoleon's feet. This might have been prevented had England been prompt to assist Prussia in her unequal struggle with France.

England now ventured upon a step

Napoleon retaliated by an act equally indefensible. He issued decrees excluding all British commerce from the continent of Europe, hoping that this exclusion would involve British manufactures in ruin, and so end the war.

These decrees, dated from Berlin and Milan, ordered that all British exports should be seized wherever found, and that this seizure and confiscation should

extend to all neutral vessels that had sels bound for any port of Europe subtouched at British ports. In this way ject to the blockade to touch first at he hoped to strip England of her carry- some British port, under penalty of



BATTLE OF AUSTERLITZ.

ing trade, which would then pass into the hands of neutrals.

To prevent this, orders in council were issued by the English government in January, 1807, requiring neutral ves- long in a new war.

seizure. These decrees and orders in council were simply so many outrages upon the rights of neutral nations, and were destined to involve England ere

In February, 1807, the Grenville ministry procured the abolition of the slave trade by act of parliament, and England ceased to take part in that infamous traffic. This great work was accomplished in the face of a fierce opposition from the Tory party and the merchants of Liverpool, the latter of whom were unwilling to give up the profits connected with the trade in luman flesh and blood. Encouraged by this success, the ministers endeavored to remove the civil disabilities of Roman Catholic citizens, but upon the first intimation of their scheme were dismissed by the king.

English Alliance Prevented.

A new ministry was formed under the Duke of Portland. Its leading spirit was the young foreign secretary, George Canning, an able and devoted disciple of Pitt. He came into office at a critical time. Napoleon, after the conquest of Prussia, had marched into Poland, and though checked by his reverse at Eylean, had won the decisive victory of Friedland, by which Russia was forced to consent to the treaty of Tilsit. The Emperor Alexander now began to court the friendship of Napoleon in the hope of obtaining the assistance of France in the conquest of Turkey. Russia closed her ports to British commerce, and compelled Sweden to do likewise, and to renounce the English alliance.

Russia and Sweden hoped to add Denmark to their league, and so obtain the services of the Danish fleet in their effort to destroy the maritime supremacy of England. Canning prevented the success of this scheme by secretly equipping a fleet in the summer of 1807 and

despatching it to Copenhagen with a demand for the surrender of the Danish fleet into the hands of England, which power guaranteed its safe return at the close of the war.

Denmark returned a spirited refusal to this demand, and Copenhagen was subjected to a terrible bombardment and forced to surrender. The whole Danish fleet, with an immense quantity of naval stores, was carried into English ports.

In spite of England's success at sea, however, Napoleon was supreme on the land, and carried out his designs on the continent without hindrance. He held Prussia down by force; changed Holland into a monarchy, and bestowed its crown upon his brother Louis; erected the electorates of Hanover and Hesse Cassel into the kingdom of Westphalia, which he gave to his brother Jerome; made his brother Joseph King of Naples, and annexed the remainder of Italy, even including Rome, to the French empire.

The "Iron Duke."

Emboldened by this success, he now sought to make himself master of the Spanish peninsula, and in his attempt to execute this design met his first great check. Spain was soon overrun, and Portugal would have shared its fate had not Great Britain come to her assistance with a small but excellent army under Sir Arthur Wellesley and Sir John Moore. After the death of Sir John Moore the chief command of the British forces in the peninsula passed to Sir Arthur Wellesley, whose able conduct of the war soon showed him to be one of the first soldiers of modern times. The French were driven out of Portugal, but Moore's unhappy fate gave them an additional advantage in Spain. While Napoleon was occupied with his struggle against Austria, Wellesley successfully held his own against the French in Spain, and won for himself a peerage as Lord Wellington.

Disastrous Defeat.

In July, 1809, a force of 40,000 English soldiers was sent to capture Antwerp, but the expedition failed, fully half of the English troops perishing in the marshes of Walcheren. This disaster brought about the fall of the Portland ministry. It was succeeded by a new cabinet under the guidance of Spencer Perceval, a man of no ability, but who, with his colleagues, was resolved to continue the war. The struggle in the peninsula was prosecuted with vigor, and if the English won their way slowly, they advanced steadily toward the French frontier. The necessities and disasters of the Russian campaign greatly weakened the French army in Spain, and simplified the task of Lord Wellington accordingly. During the greater part of 1811 Wellington remained comparatively inactive, as the unsettled state of affairs at home prevented him from receiving the vigorous support he needed. In 1813 he drove the French out of Spain, and crossed the Pyrenees after them. On the 10th of April, 1814, he fought the battle of Toulouse with Marshal Soult, and brought the war to a close.

In the mean time George III. had been seized with a return of his insanity in the early part of 1811, and the Prince of Wales had been declared regent by act of Parliament. The prince regent was strongly inclined to the Whig

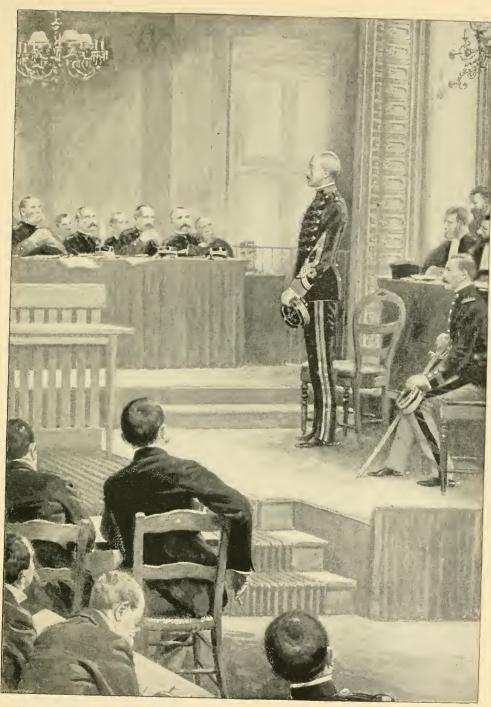
party, and was anxious to replace the Perceval cabinet with a ministry of that party. In March, 1812, Mr. Perceval was assassinated by a lunatic, and the prince regent sought to recall the Whigs to power. He was defeated in this attempt, and the old ministry, with Lord Liverpool at its head, was restored to office.

During the latter part of the European war England had been drawn into another struggle. The decrees of Napoleon and the orders in council of Great Britain had nearly ruined the commerce of America, and, after vainly endeavoring to obtain a revocation of them, the United States, on the 3d of June, 1812, declared war against Great Britain. We have related the events of this war in the American history of this century. It was closed in December, 1814.

Alliance Against Napoleon.

The return of Napoleon from Elba induced the allies to make extraordinary efforts for his destruction. An English army was sent to the frontier of the Netherlands to unite with the Prussian army under Marshal Blucher, which was advancing on the lower Rhine, and England furnished a subsidy of eleven millions of pounds to defray the cost of the war. The decisive blow was struck by the English under the Duke of Wellington, to whose exertions and skill the overthrow of Napoleon at Waterloo was due.

In the final settlement of the affairs of Europe England played a prominent part—an influence to which the great sacrifices and tremendous efforts she had made to defeat Napoleon fully entitled her. The conquests which she

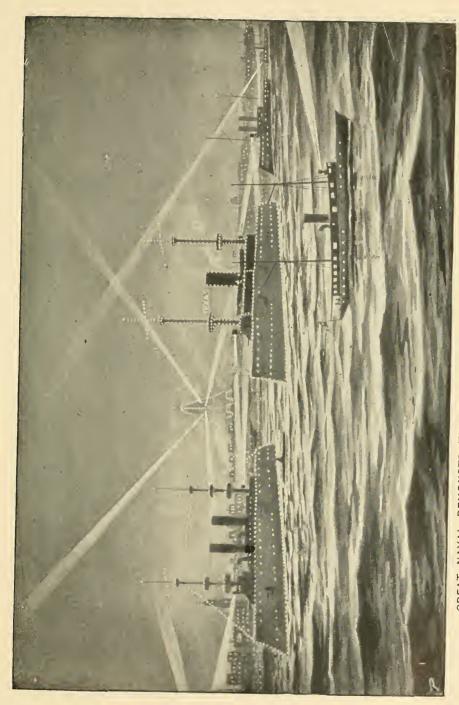


CAPTAIN DREYFUS BEFORE THE COURT-MARTIAL AT RENNES, FRANCE
IN DECEMBER, 1894, HE WAS TRIED BY COURT-MARTIAL AND CONVICTED OF TREASON. IN
JUNE, 1899, HE WAS RETURNED FROM EXILE FOR A NEW TRIAL, WHICH RESULTED
AGAIN IN CONVICTION, WITH A RECOMMENDATION TO MERCY. HE WAS
IMMEDIATELY PARDONED BY PRESIDENT LOUBET



PROF. CHARLES E. TRIPLER

HE IS TO LIQUID AIR WHAT EDISON IS TO ELECTRICITY. THIS NEW AND GREAT DISCOVERY IS DESTINED TO REVOLUTIONIZE EVERYTHING PERTAINING TO THE SUPPLY OF MOTIVE POWER FOR TRANSPORTATION, MACHINERY, REFRIGERATION, MANUFACTURE OF POWERFUL EXPLOSIVES, ETC. THE ABOVE ILLUSTRATION SHOWS A HAMMER OF FROZEN MERCURY.



GREAT NAVAL DEMONSTRATION IN PHILADELPHIA DURING THE PEACE JUBILEE A STRIKING EFFECT WAS PRODUCED BY SEARCHLIGHTS ON THE WAR VESSELS AND ON THE CITY HALL



CCPYRIGHT, 1899, BY KURZ & ALLISON THE CAPTURE OF MANILA-BATTLE BETWEEN THE AMERICAN AND SPANISH FORCES

retained at the end of the war were the Cape of Good Hope, the Dutch possessions in Ceylon, Berbice and the other Dutch settlement in Guiana, the islands of Mauritius and the Seychelles, which were captured from the French; the islands of Malta and Heligoland, the latter of which had been wrested from Denmark, and some West India islands which had been taken from France and Spain.

The peace of 1815 left Great Britain feverish and exhausted. The national debt had increased to about \$4,000,000,000,000, and the heavy taxation to which the country had been subjected had produced general distress. The long years of strife that had ensued since the accession of Napoleon to power had impoverished the continent also, and had destroyed the market for English manufactures. An excess of production in the last years of the war had crowded the English manufactories with unsalable goods, and had put a stop to the demand for skilled labor.

Discontent in England.

A series of bad harvests produced great scarcity, and this evil was greatly increased by the selfish legislation of the land-owners in Parliament, who procured the passage of an act prohibiting the importation of foreign corn until wheat had reached famine prices The sudden return of the large body of men employed in the army and navy to the pursuits of peace added greatly to the existing troubles, which in 1816 reached their highest point. The "Luddites," a society of workingmen organized in 1812 to resist the introduction of machinery into the mills, now broke out into a series of outrages and riots which gave the government great trouble. In the midst of these dissensions George III., old, blind and insane, died at Windsor Castle on the 29th of January, 1820.

Ireland Independent.

One of the chief events of the reign George III. was the union of Ireland with Great Britain. In 1782 Ireland obtained the independence of its parliament. It thus ceased to be dependent upon Great Britain, though remaining subject to the same king. The administration of Irish affairs was controlled by a selfish clique, who oppressed the remainder of the people so grievously that the country sank rapidly into poverty. Pitt made vain endeavors to break down this clique and do justice to Ireland, but was defeated. At length an association of "United Irishmen" took up the wrongs of the country, opened a correspondence with France, and finally rose in insurrection in 1796 and 1797, being goaded to this step by the lawless cruelty of the Orange yeomanry and the English troops. Several expeditions were sent to their assistance from France, but were of little avail. They were finally defeated; the insurrection was put down, and on the 1st of January, 1801, Ireland was formally united to Great Britain. From this time the Irish parliament was discontinued, and the Irish representatives were sent to the British parliament.

Upon the death of George III., his son, the prince regent, ascended the throne as George IV. He was exceedingly unpopular, and, as he had been at the head of the government for the last ten years, his accession to the crown gave no hope of a change of affairs.

Within a month after his accession a plot was discovered by the police, known as the Cato street conspiracy, which had been formed by a number of desperate men, with Arthur Thistlewood at their head, for the assassination of the whole ministry. Thistlewood and four of his accomplices were hanged.

George IV., when still Prince of Wales, had been induced by his father to marry his cousin Caroline, Princess of Brunswick-Wolfenbüttel. The mar-The prince riage took place in 1795. soon separated from his wife, and charged her with infidelity to him. His first act after becoming king was to renew this charge in the most public manner, and to cause a bill to be brought into parliament by the ministry to divorce and degrade Oueen Caroline on charges of misconduct. The queen was as popular with the people as her husbund was odious to them, and their bitter resentment of the attack upon her forced the house of Lords to abandon the bill.

No Crown For the Queen.

The king, less sensitive to public opinion, resolved to oppose her coronation as his wife, and in this step was supported by the privy council. The queen was equally determined to maintain her rights, and on the morning of the day appointed for the coronation presented herself at the doors of Westminster Abbey, but was refused admission. This humiliation was fatal to her; she was taken ill, and died August 7, 1821.

A new ministry, under the Duke of Wellington, in 1828, reaped the honor of inaugurating an important measure of reform which was the outgrowth of the work begun by Pitt and Canning.

Until the reign of George III. the Roman Catholic subjects of Great Britain had remained liable to penal laws of such severity that the government was never willing to execute them. In that reign many of these restrictions were removed from such Romanists as would take an oath prescribed for them, and finally all grades of the military and naval service were thrown open to them. They were still exclued from both houses of parliament and from certain civil offices and privileges by the oath of supremacy and the declaration required of them against the doctrine of transubstantiation, the sacrifice of the Mass, and the invocation of the saints.

O'Connell in Parliament.

Pitt attempted to remove these disabilities, but the king firmly refused to allow the question to be opened. Canning attempted to secure the same object, but died too soon. The accession of the ministry of the Duke of Wellington greatly dampened the hopes of the Catholics; but they were soon revived by the sudden display of strength by the Irish Catholics, who elected Daniel O'Connell, a popular politician, to a seat in parliament. O'Connell was sustained by the entire Catholic population of Ireland, and demanded the removal of the disabilities of his co-religionists, threatening civil war as the alternative.

The danger was very great, and the Duke of Wellington brought in a bill which he declared was the only means of averting civil war, and which admitted Romanists to parliament and to all civil and military offices under the crown, save those of regent, lord chancellor in England and Ireland, lord lieutenant of Ireland, and some others.



MARRIAGE OF QUEEN VICTORIA TO PRINCE ALBERT OF SAXE-COBURG-GOTHA.

The bill passed both houses of parlia- mercial monopoly of the East India ment, and received the royal assent on Company was abolished, and the trade the 13th of April, 1829.

In 1828 another reform was accomplished in favor of the Protestant dissenters by the repeal of the laws requiring all persons taking office to receive the holy communion according to the forms of the established church.

William IV. on the Throne.

On the 26th of June, 1830, George IV., who had passed the last years of his life in seclusion at Windsor Castle, died. His only child, the Princess Charlotte, being dead, he was succeeded by his brother William Henry, Duke of Clarence, who became king as William IV.

The reformed parliament—the object of so many hopes and fears—met on the 29th of January, 1833. It passed several important acts, but its violence—especially that of the great Irish agitator, O'Conneil—went far to justify the fears of its enemies and produce a feeling of reaction in the country. Even the king went over to the Tories, dismissed the ministry, and placed Sir Robert Peel at the head of a new cabinet in November, 1834. The general election in the following spring restored the Whigs to power, with Lord Melbourne as chief of the new ministry.

Although the slave trade had been abolished by Great Britain, slavery existed in the colonies until 1833. In August of that year the "Act for the Abolition of Slavery" throughout the British dominions was passed. The government paid to the owners of the slaves thus liberated the sum of \$100,000,000 as compensation for the loss of their property. In the same year the com-

mercial monopoly of the East India Company was abolished, and the trade of that country thrown open to the whole British nation. A new poor law was enacted in 1834 to check the growing evils of pauperism.

In the autumn of 1830 the Liverpool and Manchester railway was opened by its projector, George Stephenson. This was the beginning of the great railway system of Great Britain. The new system of transportation, being found successful, was rapidly adopted in various parts of the kingdom, and proved a powerful aid in the development of the trade and wealth of the kingdom.

Queen Victoria.

On the 20th of June, 1837, William IV. died at Windsor Castle. His only children, two daughters by his wife Adelaide, Princess of Saxe-Meiningen, had both died in infancy. His crown of Hanover passed to the next male heir, Ernest Augustus, Duke of Cumberland, the fifth son of George III., and thus became forever separated from that of England. William was succeeded on the throne of Great Britain and Ireland, in default of male heirs, by his niece, the Princess Alexandrina Victoria, the only child of his brother Edward, Duke of Kent, the present reigning sovereign.

Queen Victoria was but eighteen years old at the time of her accession to the throne, but was popular with all classes of her subjects. On the 10th of February, 1840, the queen married her cousin, Albert, Prince of Saxe-Coburg-Gotha, a man of many virtues, and of ability and rare good sense, qualities which won him the affection and confidence of the English people, and enabled him to retain these feelings throughout his life.

In 1839 an association known as the "Anti-Corn-Law League" was formed, and devoted itself to the task of spreading its principles by speeches and various publications. The association succeeded in gradually enlightening the English mind as to the effect of protective laws. Sir Robert Peel, who had entered office pledged to continue the protective system, became convinced of its inexpediency. In 1846 the failure of the potato crop in Ireland threatened that country with a terrible famine; and at the same time the harvest in England failed.

Cobden and Free Trade.

This emergency compelled the triumph of the free trade cause, and Sir Robert Peel was forced to introduce bills abolishing or reducing to a nominal figure the duties on foreign corn, cattle and other articles of food. bills were passed, but the resentment of the Conservatives was bitter, and drove Peel from office. He was succeeded by a Whig ministry, under Lord John Russell, which continued in office until 1852. The complete operation of the free trade measures was not secured until 1849. The credit of the victory was due to Richard Cobden, the leader of the free trade party, and one of the wisest political economists England ever produced.

In 1853 the designs of Russia upon Turkey induced England to take a decisive stand against the former power. An alliance was affected with France for this purpose in 1854, and was followed by the Crimean war. The sufferings of the English army through the neglect of the government in the winter of 1854–55 aroused a storm of indigna-

tion at home, which drove the Aberdeen ministry from power early in 1855. A new ministry was formed under Lord Palmerston, and devoted itself with energy to the prosecution of the war.

Sebastopol, a fortified town of the Crimea, underwent an eleven months' siege by the English and French. The allied army appeared before the town September 20th, 1854, and the grand attack and bombardment commenced, without success, on the 17th of October following. For many months assaults were continued, and after repeated bombardments a grand attack was made September 8th, 1855, upon the Malakhoff Tower and the Redans, the most important fortifications to the south of the town.

A Desperate Struggle.

The French succeeded in capturing and retaining the Malakhoff. The attacks of the English on the great Redan and of the French upon the little Redan were successful, but the assailants were compelled to retire, after a desperate struggle, with great less of life. The French lost 1646 killed, of whom 5 were generals, 24 superior and 116 inferior officers, 4500 wounded and 1400 missing. The English lost 385 killed, 29 being commissioned and 42 non-commissioned officers, 1886 wounded and 176 missing.

In the night the Russians abandoned the southern and principal part of the town and fortifications, after destroying as much as possible, and crossed to the northern ports. They also sank or burnt the remainder of the fleet. The allies found a very great amount of stores when they entered the town, September 9th. The works were utterly

destroyed in April, 1856, and the town was restored to the Russians in July.

During the American civil war England proclaimed a policy of neutrality, which was not fairly adhered to, the result being that a number of Confederate cruisers, built, armed and manned in British ports, were suffered to go to sea and nearly swept American commerce out of existence. The United States were thus given a valid cause of irritation against Great Britain, and at a later period presented claims against that government, which were settled in a Court of Arbitration by awarding damages of 15,000,000 dollars to the government at Washington.

The Franchise Extended.

A bill passed Parliament in August, 1867, which extended the borough franchise to all rate-payers and lodgers occupying rooms to the annual value of £10 (\$50). The county franchise was reduced to £12 (\$60). Thirty-three members were withdrawn from the English boroughs, and of these twentyfive were distributed among the English counties; the rest were assigned to Scotland and Ireland. This measure added large numbers of workingmen to the voting class, and when the elections of 1868 were held, a Liberal parliament was returned by overwhelming majorities. Mr. Disraeli, who had succeeded Lord Derby as premier, withdrew from office upon the announcement of the result, and a liberal ministry, with Mr. Gladstone at its head, came into power.

The new government addressed itself with vigor to some of the most difficult questions of the day. An effort was made to remove the chronic discontent of Ireland by the disestablishment and

disendowment of the Protestant Church in 1869. This measure put an end to the compulsory payment by the Irish of taxes for the support of a church with which the vast majority of them had no sympathy. In 1870 a land bill was passed, which established a sort of tenant-right in all parts of Ireland. In 1868 the non-conformists were relieved of the compulsory payment of church rates; and in 1871 still further justice was done them by the abolition of all religions tests for admission to offices or degrees in the universities.

Public School System.

The army and navy were subjected to important reforms, and in the former the system of promotion by purchase was abolished. In 1871 a bill was passed by parliament establishing school-boards in every district, and levying local rates for their support. In 1871 a radical step towards parliamentary reform was taken in the passage of an act establishing the practice of voting by the ballot. The magnitude and extent of Mr. Gladstone's reforms, however, alarmed the country, and in 1874 a bill introduced by him for the organization of university education in Ireland was defeated. The ministers appealed to the country, and were answered by the election of a strongly Conservative parliament. Mr. Gladstone and his colleagues thereupon resigned their offices, and were succeeded by a Conservative ministry, with Mr. Disraeli as premier.

The power of Great Britain in India continued to increase through the early part of the century, and was exercised through the notorious East India Company. In 1815 the whole of Ceylon was brought under English rule, and in

1819 an English colony was founded at Singapore, near the southern extremity of the Malay peninsula, and became one of the principal markets of the India trade. In 1833 the charter of the East India Company expired. The company was given by the British Parliament the government of Hindustan for twenty years, but its monopoly of the Eastern trade was not renewed; and the commerce of India was made free to all the subjects of Great Britain.

Opium in China.

One of the principal results of the establishment of the colony at Singapore was the sudden development of the opium trade with China. The Chinese government had previously tolerated this traffic, but now, becoming alarmed by the fearful evils which the use of opium was fastening upon the Chinese nation, endeavored to put a stop to it. An imperial edict prohibited the importation of opium, but the traffic was carried on by the English and Chinese merchants in defiance of the law. The trade was very profitable, and the connivance of the officials could be purchased by large bribes. The imperial government then ordered the British merchants to be blockaded in their warehouses at Canton until they surrendered all the opinm in their possession, amounting in value, it is said, to ten millions of dollars.

The British government resented this attempt of China to protect her people at the expense of English profits, and a war of two years ensued. Canton was taken by the English, but was ransomed for six millions of dollars, and several other places were bombarded. The Chinese were at length compelled to make

peace, and a treaty was signed at Nankin in August, 1842, by which the island of Hong Kong was ceded to the British, and the ports of Canton, Amoy, Foochoo, Ningpo and Shanghai were thrown open to the trade of the world, and were made the official residences of European consuls. China was also compelled to pay to Great Britain an indemnity of \$21,000,000.

In 1838 Great Britain became involved in a war with the Afghans, for the purpose of restoring to his throne Shah Sujah, the ruler of Cabul, who had been deposed by his people. He proved himself such an execrable tyrant that he was murdered by his subjects.

Revolt Against the English.

A general revolt of the Afghans followed in 1842, and the British army, forced to retreat from Cabul, was cut off almost to a man in the Khyber mountain pass. An expedition under General Pollock avenged this disaster, and captured Cabul in 1842. The war, however, greatly encouraged the natives in their efforts against the English, and in 1843 a war with the Ameers of Scinde broke out. It resulted in the conquest of that country by Sir Charles Napier, in 1843, who was appointed Governor of Scinde, and who ruled his province with firmness and success.

In 1845 and in 1848 there was war between the British and the Sikhs of the Punjaub. On the 21st of February, 1849, Lord Gough won the decisive victory of Goojerat, and this was followed by the close of the war, and the annexation of the Punjaub to the British dominions. A little later Sir Henry Lawrence was appointed to the government of the Punjaub, which, since the

days of Alexander the Great, had been the scene of constant rapine and strife. His rule was so just and kind that the Sikhs were completely won over to the English authority.

The dominion of Great Britain in Incia extended over hundreds of millions received for them from England. The cartridges of these rifles were supposed to contain beef-tallow, and as the use of this article, which is sacred to the Hindus, is forbidden to any devout native, several regiments objected to using the cartridges, and their wishes were re



THE STORMING OF DELHI BY THE ENGLISH.

of people, and had been won and was maintained by a mere handful of British troops. The great mass of the troops employed by the English were natives, and were known as Sepoys. They were generally contented, and obeyed their English officers with readiness and confidence.

spected by the government, which suppressed the cartridges. The discontent did not subside, however, but continued to spread, and early in 1857 a formidable mutiny broke out among the native troops in Bengal, Oude and the province of Delhi.

Wherever they had the power, the In 1856 a supply of Enfield rifles was | insurgents massacred all the English





BORN IN MAY 1819, SUCCEEDED TO THE THRONE IN 1837, CROWNED AT WESTMINSTER JUNE, 1838, AND CELEBRATED HER SIX "Y YEARS' REIGN IN 1857 QUEEN VICTORIA





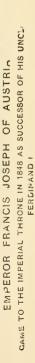
QUEEN WILHELMINA OF HOLLAND CROWNED AT AMSTERDOM AMID GREAT REJOICINGS, SEPTEMBER 6TH, 1898

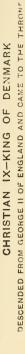
OSCAR II—KING OF SWEDEN AND NORWAY

BORN IN STOCKHOLM IN 1829; CAME TO THE THRONE IN 1872 UPON THE

DEATH OF HIS BROTHER CHARIES XV











MARIA MARGARET OF SAVOY, FIRST COUSIN OF HER HUSBAND KING HUMBERT 1, AND THE MOST CULTURED AND ACCOMPLISHED QUEEN IN EUROPE THE QUEEN OF ITALY

ON OF VICTOR-EMMANEL II, SUCCEEDED TO THE THRONE UPON THE KING HUMBERT OF ITALY DEATH OF HIS FATHER IN 1878 they could lay hands on, sparing neither age nor sex. The middle and lower classes of the population joined the insurgents, but the chiefs and large landholders as a rule remained faithful to the government. The insurgents established their capital at Delhi, and proclaimed its nominal king Emperor of Hindustan. Cawnpore was besieged by the Sepoys, and surrendered after a siege of two hundred days. The promise of safety made to the garrison was violated and they were treacherously massacred.

Traitors Punished.

Delhi was taken by the English in September, 1857, and the insurgents severely punished. Its emperor was transported to Burmah, and his two sons were put to death. The English made heroic efforts to re-establish their authority, and defeated the greatly superior forces of the Sepoys over and over again. Campore was taken by General Havelock, who then united his small army with that of Sir James Outrain, and together they succeeded in relieving the besieged garrison of Lucknow, the capital of Oude, which had held out heroically against an overwhelming force of Sepoys. In this siege Sir Henry Lawrence was killed.

The insurgents did not abandon their attempt upon Lucknow after the arrival of Havelock and Outram, but held on until March, 1858, nearly five months after the first investment, when the arrival of an English army under Sir Colin Campbell forced them to retreat after a severe defeat. The relief of Lucknow virtually ended the war. The fighting continued through the summer of 1858, but the insurrection was crushed, and its leaders were put to death, or pun-

ished with great severity. The British power was firmly re-established throughout India, and no further outbreak has occurred since this triumph.

In addition to her possessions in India, Great Britain during the nineteenth century has built up a flourishing empire in the southern Pacific. It is larger in extent, and may yet be of greater importance than India. The vast island of Australia, which really merits the title of a continent, is only a part of these vast possessions.

In 1873 a quarrel broke out between the English and the King of Ashantee, in western Africa, with respect to a stipend formerly allowed by the Dutch to the king. England had been formally in possession of the Gold Coast and the old Dutch colonies since 1872, when she acquired them by treaty with the Dutch. The colonial authorities now demanded that the King of Ashantee should withdraw his warriors from their territory, but so far from complying with this demand, the sable potentate proceeded to levy war upon the English possessions.

The Ashantee Expedition.

Late in 1873 the British government despatched a force under Sir Garnett Wolseley to the Gold Coast. He arrived on the coast about the close of the year, and at once advanced into the Ashantee territory. He met with considerable resistance, and lost many of his men in consequence of the unhealthiness of the country, but steadily drove the natives before him. About the first of February he defeated the Ashantee forces in a pitched battle in the neighborhood of Coomassie, their capital, and on the fifth entered Coomassie and received the sub-

mission of the king, who agreed to enter into a treaty binding himself to respect the English possessions. This success broke the Ashantee power for the time, and gave peace and protection to the English settlements in western Africa, and prepared the way for civilization.

On the 2d of May, 1876, Queen Victoria was formally proclaimed, in addition to her other titles, "Empress of India."

The struggle of the Irish people for "Home Rule" enters largely in the later history of Great Britain. Measures enforced in the interest of the landlords have been bravely resisted by the Irish peasantry. Organized effort was adopted and a land league was formed, which became dominant in 1880. In 1881 Gladstone's Land Act was passed, yet legislation was powerless to appease the Irish sense of injustice and allay the excitement.

Foul Murders.

In 1882 Lord Cavendish and Mr. Burke were appointed secretary and under-secretary respectively for Ireland. Upon their arrival in Dublin they were murdered under circumstances of peculiar atrocity. The act created a profound sensation and served to render the strife more bitter.

Disraeli (Lord Beaconsfield) having become prime minister, war broke out in Egypt and the Soudan. Dissatisfaction at home occasioned the downfall of Beaconsfield's ministry, and he was succeeded by Gladstone, who, not being able to carry his "Home Rule" measure, in turn yielded the government to Lord Salisbury. During 1887, and at the beginning of 1888, England, al-

though at peace abroad, was agitated with domestic strife.

On the 21st of June, 1887, the queen attended the jubilee services at Westminster Abbey in honor of the fiftieth anniversary of her accession to the throne. The agitation by the Home Rule party of Ireland continued throughout 1890 and 1891, Mr. Gladstone advocating eloquently the cause of the oppressed Irish people. Mr. Parnell, who by his conspicuous services had greatly aided the Irish cause, died at Brighton October 6, 1891.

The Queen's Jubilee.

In June, 1897, Queen Victoria completed the sixtieth year of her reign, the longest reign of any English sovereign. This event was celebrated by a jubilee in which not only the people of England participated, but other nations through their representatives. The occasion was one of universal rejoicing.

In October, 1899, war broke out between the English and the Boers, a name given to the Dutch settlers in South Africa, since the sixteenth century, who still retain their national character. Discontented with the British rule in the Cape since 1814, large bands of them in 1835-37 emigrated northward, and founded the Orange Free State, 1836, and the Transvaal Republic, 1848, after much fighting with the natives. 1899 the English, being greatly dissatisfied with the Boers for denying to the Outlanders, or foreigners, rights that belonged to them, interfered in behalf of the English-speaking part of the population, and the result was a sharp contest. The spirit of the Boers was shown by resisting so formidable a power.

CHAPTER A.

France in the Nineteenth Century.

RMIES in graud array, victories but just won and destined evermore to be famous, a brilliant conqueror whose word was magic and whose tread jarred nations, empires of the old world startled from the sleep of ages, mighty forces in conflict and new ideas and principles seething and mystifying all political philosophers as to what the future would bring forth—this was the condition of France when the bell tolled for the departure of the old century and the new one was ushered in.

The triumplis of Napoleon had already astonished the world, and tremendous combinations were forming for his overthrow. The unsettled state of affairs in France gave him an opportunity that he eagerly grasped. His ambition was boundless and for a time his power seemed to be. The French Revolution was just past, and out of the chaos and confusion a new national life was to come.

A Directory was formed to administer the government, which was now conducted in a spirit of order and conciliation. In 1797 Bonaparte and his brother-commanders were omnipotent in Italy; Austria was compelled to give up Belgium and recognize the Cisalpine Republic. The glory of the French arms was re-established abroad, but at home the nation was still suffering from the shock of the Revolution. The Directory repudiated two-thirds of the national debt, and thus almost mined the commerce and credit of France.

Under the pretext of attacking England, a fleet of 400 ships and an army of 36,000 picked men were equipped; their destination proved, however, to be Egypt, whither the Directory sent Bonaparte; but the young general, resigning the command to Kléber, landed in France in 1799. The Directory fell on the famous "18th Brumaire" (9th of November, 1799); under the constitution of Sieyès the State was put under three consuls who, unlike those of Rome, were three in number, with different degrees of authority.

Bonaparte's Supreme Power.

Napoleon secured supreme power as First Cousul. In 1800 a new constitution was promulgated, vesting the sole executive power in Bonaparte, who showed consummate skill in reorganizing the government, to which he imparted a systematic efficiency and a spirit of centralization that secured a thoroughly practical administration. Having resumed his command, he marched an army over the Alps, attacked the Austrians unawares, and decided the fate of Italy by his victory at Marengo. In 1801 the peace of Luneville was concluded, and the boundaries of France were once more extended to the Rhine.

England was the only country which refused to recognize the various Italian and German conquests of France; and, with the exception of a brief period of peace, England remained the implacable foe of Bonaparte from the days of the consulate to his defeat at Waterloo.

Every period of respite from war was employed by the First Consul in fostering trade and industry, and in obliterating both in private and public life the stains left by the Reign of Terror.

In 1804, on an appeal by universal suffrage to the nation, Bonaparte was proclaimed Emperor. The Pope came

hands. For a time Napoleon's influence with the weakened powers of the Continent succeeded in maintaining an injurious system of blockade against England; and, except in the Peninsula, his arms were everywhere victorious. His marriage, too, with the Archduchess Maria Louisa, a direct descendant of



BONAPARTE DISSOLVING THE COUNCIL OF FIVE HUNDRED.

to Paris to crown him and his wife Josephine. Napoleon took the crown from the hands of the Pope, placed it on his own head, and then crowned the Empress Josephine, who knelt before him. A new nobility was rapidly created, and the relatives and favorites of the emperor received vanquished kingdoms and principalities at his

the ancient House of Hapsburg, 1810, seemed to give to his throne the prestige of birth, which alone it had lacked. He kept up the Democratic impulse of the Revolution as much as was wanted to drive his engine of war. His tactics would have availed him little against the successive European coalitions had he not adopted the principle of national



RENOWNED RULERS OF THE CENTURY





CORONATION OF NAPOLEON AND THE EMPRESS JOSEPHINE.

armies, general conscription, and forced requision introduced by Carnot, the "organizer" of revolutionary France's victorious resistance against foreign aggression. This principle has since become the outstanding feature of continental warfare.

It gave Napoleon an empire including practically the whole of Europe, except Russia, Turkey and Great Britain; when it was quietly introduced by Prussia, it assisted effectually in bringing to a close the emperor's career, but not until he had made himself king of Italy, 1805, made of Holland and Naples vassal kingdoms, 1806, set up in Germany the Confederation of the Rhine, conquered Prussia, 1806-7, occupied Portugal, deposed the Bourbons in Spain, 1808, reduced the Hapsburgs after four campaigns from their medieval title of Roman emperors to the status of emperors of Austria, made of Rome a French town, and carried off Pope Pius VII. to Fontaineblean.

The Emperor's Downfall.

In the long run, the evils attending his high-handed policy both in France and out of it undermined his position. The French navy was destroyed by Nelson at Trafalgar, 1805, and the seatrade of France much injured. His despotism, the unceasing strain of war, the burden of conscription, the estrangement between emperor and pope threw the seed of disaffection among the French people.

From 1811 to his final defeat in 1815 the emperor rapidly lost ground. The disastrous Russian campaign, in which his enormous army of 400,000 men was lost amid the rigors of a northern winter, was soon followed by the falling away

of his allies and feudatories. Napoleon himself was still victorious wherever he appeared in person, but his generals were beaten in numerous engagements; and the great defeat of Leipzig, 1813, compelled the French to retreat beyond the Rhine. The Swedes brought reinforcements to swell the ranks of his enemies on the east frontier, while the English pressed on from the south; the senate and his ministry betrayed his cause, and the allies marched on Paris, which, in the absence of the emperor, capitulated after a short resistance, March 30, 1814.

Begins a New Struggle.

Napoleon now abdicated in favor of his young son, and retired to the island of Elba, the sovereignty of which had been granted to him. His wife and son removed to Vienna; his family were declared to have forfeited the throne; France was reduced to her former limits, and the provinces she had acquired were restored to their national rulers.

On the 3d of May Louis XVIII. (the brother of Louis XVI.) made his entry into Paris. The conduct of the Bourbons did not conciliate the nation; they returned loaded with debts, and surrounded by the old nobility and clergy, who had not renounced their former privileges, and who looked upon the generation of Frenchmen that had arisen since the Revolution as their natural enemies.

A narrow spirit influenced the weak policy of the king, which led to the establishment of a strict censorship, the extension of the powers of the police, and the persecution of the adherents of the Empire; while the lower classes and the army, who alike resented the

humiliating reaction that had followed the former excitement of war and conquest, were treated with an indifference, and even contempt, by the returned officials, to which they were wholly unaccustomed.

On the 1st of March, 1815, Napoleon left Elba and landed in France. The soldiers flocked around his standard: the Bourbons fled, and he took possession of their palaces. The news of his landing spread terror through Europe; and on the 25th of March a treaty of alliance was signed at Vienna between Austria, Russia, Prussia and England, and preparations were at once made to put down the movement in his favor and restore the Bourbon dynasty. At first the old prestige of success seemed to attend Napoleon; but on the 18th of June he was defeated at Waterloo; and, having placed himself under the safeguard of the English he was sent to the Island of St. Helena, in conformity with the generally acknowledged sentiment that it was necessary to the peace of Europe to remove him finally and definitely from the scene of his former power.

"A Martyr to France."

On the 5th of May, 1821, the dethroned Emperor died at St. Helena, after a captivity of nearly six years, in the fifty-second year of his age. His death was sincerely mourned by the mass of the French people, who regarded him as a martyr to the cause of France.

On the 16th of September, 1824, Louis XVIII. died. He was succeeded by his brother, the Count of Artois, who ascended the throne as Charles X. He was a true Bourbon; ignorant, narrow-

minded, a firm believer in absolute rule and thoroughly under the influence of the Jesuits. In his disposition he was frank and cordial, and his friends were warmly attached to him. crowned in the Cathedral of Rheims, on the 29th of May, 1825, and the ancient ceremonial of the Middle Ages was revived in all its details for this occasion. Charles had been the first to emigrate from France in 1790, at the outbreak of the Revolution. He returned to it in 1814 with the same ideas and prejudices he had taken away with him. world had moved far beyond him in the thirty-five years which had rolled by since he fled from his country.

The Nation Enraged.

The reactionary tendencies of the new government alarmed and angered the nation. The first evidence of this feeling was given at a review of the national guard in the spring of 1827, when the troops, upon passing the king, shouted, "Down with the ministers! Down with the Jesuits!" The king at once disbanded the national guard of Paris, but unfortunately for himself left them in pessession of their arms. In the elections of 1827 an overwhelming majority against the government was returned to the chamber. The king was obliged to dismiss his ministers and to summon a more liberal cabinet.

One of the first acts of the new ministry was to remove the system of public education from the control of the Jesuits. This was a very popular measure with the nation, but it gave great offence to the king, who, on the 8th of August, 1829, dismissed the ministers and appointed a new cabinet, with Prince Polignac at its head. The appointment

of this ministry—every member of which was noted for his devotion to absolutism—was regarded by the people as a declaration of war on the part of the king against the charter and all the liberties of Frenchmen. The chamber of deputies plainly told the king that the new ministers did not enjoy the confidence of the country, and was dissolved by the angry sovereign. The deputies were re-elected by the people, and the new chamber was more than ever in the hands of the opposition.

Trouble in Algiers.

While this struggle had been going on in France, a foreign dispute had been engaging the attention of the government. The Dey of Algiers had robbed the French merchants residing in his dominions of large sums, and had insulted the French consul upon his demanding redress. In the summer of 1829 an expedition under the command of General Bourmont, the minister of war, was despatched to Algiers to obtain redress by force of arms. It landed before that city, carried its defences by assault and compelled the dey to surrender. Algiers was at once occupied by the French troops, who were enriched with the spoils of the city.

As soon as he learned of the success of the liberals in the election of 1830, Charles X. determined to compel the triumph of his absolute power by employing a strained interpretation of an article of the constitution which authorized the sovereign "to make regulations and decrees necessary for the execution of the laws and the safety of the state." By virtue of this clause he assumed the right to alter and abrogate some of the most essential provisions of the charter.

On the 25th of July he issued five ordinances, which appeared in the "Moniteur" of the 26th. The first of these suspended the liberty of the press; the second dissolved the newly elected chamber of deputies; the third radically changed the system of election; the fourth convoked the chambers for the 28th of September following, and the fifth appointed some ultra royalists to the council of state.

The appearance of these ordinances threw Paris into a tunult. The national guard took up arms, with the veteran Lafayette at their head; the streets were barricaded; the tricolor was displayed in the place of the flag of the Bourbons, and the royal troops were attacked by the citizens. The garrison of Paris was commanded by Marshal Marmont, but was insufficient to put down the populace, though it obtained some important successes.

Troops Driven from Paris.

At length the troops began to fraternize with the people. The Louvre and Tuileries were carried by the populace and the troops were compelled to retreat from Paris. Charles X. fled from St. Cloud to Rambouillet, where, hopeless of regaining his throne, he abdicated it in favor of his grandson, the Duke of Bordeaux. He then quitted the kingdom and took refuge in England.

In the meantime a number of leading citizens of Paris, anxious to keep the revolution within bounds, had prevailed on the Duke of Orleans, the cousin of Charles X., who was known to possess liberal opinions, to assume the control of the government as lieutenant-general of the kingdom. He convoked the two chambers for the 3d of August, and

those bodies upon assembling declared the throne vacant by the abdication of the elder branch of the house of Bourbon, and elected Louis Philippe, Duke of Orleans, "King of the French."

Louis Philippe accepted the crown, and declared his intention to reign as a constitutional sovereign. On the 9th of August he took an oath to maintain the charter as amended by the chambers in the interests of popular liberty, and ascended the throne in the presence of the great officers of the state. Absolutism was dead in France; the will of the people was supreme.

An Eye to the Main Chance.

The new king was the son of the notorious "Philippe Egalité," Duke of Orleans, who was belieaded during the French Revolution, and was in his forty-seventh year. He was sincere in his professions of liberality so long as his principles did not conflict with his interests; but he thoroughly understood the art of accommodating himself to circumstances. He did not find his new position a pleasant one, for the legitimists, as the partisans of the elder branch of the Bourbon family, who supported the Duke of Bordeaux, were called, denounced him as a usurper and a traitor to his race; while the Bonapartists declared that he had been made king by a clique in opposition to the will of the people.

The leading principles of Louis Philippe's reign were constitutional government at home and peace with foreign powers. In the internal administration of the kingdom the king sought honestly to adhere to the charter. Two legislative chambers secured the rights of the people, and the elections were

comparatively free. The press was nominally unshackled, but the government continued to exercise a mild censorship over it. The friendship of foreign powers, especially of England, was cultivated, and France scrupulously refrained from engaging in the affairs of any European country, except where her own interests were directly concerned. The internal order of the kingdom was seriously disturbed by several popular outbreaks during the first years of the new reign.

Popular Discontent.

The revolution of 1830 affected the rest of Europe profoundly. In Italy, Germany, and Poland, there were outbreaks of greater or less magnitude. Belgium had never been satisfied with its compulsory union with Holland in 1815, and now rose in general insurrection against the Dutch government. The Dutch troops were driven out of Brussels on the 23d of September, after a stubborn fight, and took refuge in the fortress of Antwerp. The Belgian provinces organized a revolutionary congress, which now appealed to the five great powers of Europe to protect Belgium against Holland, and King William at the same time made an appeal to the same powers to compel the Belgians to submit to his authority.

On the 20th of September, 1830, the five powers signed a protocol recognizing and guaranteeing the independence of Belgium as a separate kingdom, the crown of which was bestowed upon Prince Leopold of Saxe-Coburg, the widowed husband of the Princess Charlotte, of England. In June, 1831, Leopold was proclaimed king by the Belgian government, and in the course of

the following year married the Princess Louisa, the eldest daughter of King Louis Philippe.

The King of Holland refused to submit to the decision of the great powers, and declined to evacuate Antwerp, which was held by a garison of 4,000 Dutch troops, under General Chassé. Healso retained the forts on the Scheldt. A treaty was signed between France and England for the assistance of the Belgians. A French army of 50,000 men entered Belgium in November and laid siege to Antwerp, which, after a memorable defence, was forced to surrender on the 23d of December. The Dutch king now withdrew his troops from Belgium, and the French army at once returned to its own country.

Prominent Statesmen.

The ministers of Louis Philippe were naturally chosen from the Orleanist party, which had made him king. Prominent among these were M. Thiers and M. Guizot, men of great abilities and widely different opinions. The former was regarded as the leader of the more liberal wing of the Orleans party; the latter was the avowed champion of the extreme monarchical wing. M. Thiers came into office in the ministry of Marshal Soult in the spring of 1832, as minister of the interior. He betrayed a singular inconsistency throughout his whole political career.

When out of office he was the champion of the most liberal opinions; when in office he was as conservative as his great rival, M. Guizot, himself. On the 22d of February, 1836, he became prime minister. Spain was at this time torn by civil war, and M. Thiers was very anxious to intervene in her affairs. The

king, however, refused to be guided by his advice, and the ministry resigned after an existence of six months.

On the 13th of November, 1836, Prince Louis Napoleon Bonaparte, the son of Louis and Hortense, and the nephew of the Emperor Napoleon, made an attempt to excite a revolt of the garrison of Strasburg, for the avowed purpose of overthrowing the Orleans monarchy and re-establishing the empire. The troops refused to join him, and he was arrested and sent by way of South America to New York.

England's Bold Move.

In 1839, Mehemet Ali, the Viceroy of Egypt, threw off his allegiance to the sultan and conquered Syria. France, under the guidance of M. Thiers, who was once more prime minister, demanded that Meliemet Ali should be allowed to retain Syria and Egypt. England, on the other hand, insisted on the unconditional surrender of Syria to the sultan, and induced the other powers to sustain her. The result was that the other four great powers, without communicating their intentions to France, signed a treaty with Turkey, in virtue of which an English, Austrian and Turkish fleet reduced the Syrian ports and compelled Mehemet Ali to withdraw his forces from Syria into Egypt. The matter was settled by assigning Egypt, in independent hereditary possession, to Mehemet Ali, and restoring Syria to the porte.

The "Quadruple Treaty" was regarded by the French as an act of treachery on the part of England, and a general desire was expressed for war with that country. The principal results of the excitement were the fortifi-

cation of Paris with an enciente and a system of detached forts; and the fall of M. Thiers' ministry, which was regarded as responsible for the advantage that had been gained by England. A new ministry, under Marshal Soult, was installed in October, 1840. The guiding spirit of this ministry was M. Guizot.

The quarrel with England was settled, and as a peace-offering Great Britain agreed that the remains of the Emperor Napoleon should be removed from St. Helena to France. They were disinterred and conveyed to France by a French squadron, commanded by Prince de Joinville, the son of the king. The squadron reached Cherbourg on the 8th of December, 1840, and the remains were transferred to a smaller vessel and conveyed up the Seine to Paris, where they were interred in the chapel of the Hotel des Invalides with the most imposing ceremonies.

Death of the Heir Apparent.

On the 13th of July, 1842, the Duke of Orleans, the eldest son of Louis Philippe and the heir to the throne, died from the effects of an accident. He left two sons—the Count de Paris and the Duke de Chartres. The former, who thus became the heir to the throne, was born in 1838.

The harvests of 1846 and 1847 were bad, and these failures were followed by an era of high prices and great distress throughout the kingdom. Wages declined and work was scarce. The king had never been entirely popular with the people, who wished to be rid of the whole Bourbon family. The general discontent at home was increased by the frequent failures in the foreign policy of France. The Spanish

marriages, the quadruple treaty, the loss of the English alliance, and other matters, greatly tended to increase the dislike which the masses felt for the Orleans monarchy.

The republicans eagerly fomented this discontent, and the policy of the government, which was growing more conservative every year, greatly simplified their task. In the session of the chambers in 1847 the liberals demanded certain reforms which would enforce more literally the terms of the charter, but the government, under the guidance of M. Guizot, firmly refused to grant their demands.

Political Banquets.

The liberal members of the chamber now proposed to give a series of "reform banquets" in Paris and the provinces as a means of manifesting the strength of their party. A banquet was arranged to be given in Paris, but was prohibited by the government, and it was determined that it should take place in spite of this prohibition. The government again forbade the banquet. The king and his ministers fancied themselves secure, when in reality the popular discontent had reached such a pitch that it was ready to break out in revolution at any moment.

The banquet was abandoned by its projectors, who had accomplished their plan of placing the government in an attitude of hostility to the liberties of the people; but on the 22d of February, 1848, dense crowds filled the streets of Paris, shouting, "Vive la Réforme!" An army of nearly 60,000 men had been collected by the government in the vicinity of Paris, under the vetern Marshal Bugeaud, but no troops were used that day.

On the 23d the national guard was placed under arms, but showed unmistakable sympathy with the people, and prevented the regular troops from dispersing the crowds in the street. events of this day opened the king's eves to the true state of affairs. M. Guizot at once resigned his office, and was succeeded by Count Mole, who proceeded to form a new ministry. It was too late, however, to put down the outbreak by a change of ministry. That night a detachment of troops fired upon a body of rioters which had attacked them, killing a number of citizens. The bodies of the slain were paraded by torchlight through the streets of Paris, and the republicans and socialists at once rose in arms.

The King Abdicates.

Barricades were erected, and shouts of "Vive la Republique!" rose from the throng—cries that had not been heard in France for forty years. Count Mole now declined the task of forming a new ministry, and M. Thiers was intrusted with it. The first act of the new minister was to induce the king to order the troops to withdraw from Paris. Marshal Bugeaud, upon receiving this order, resigned his command in disgust. This was on the 24th of February. On the same day the troops of the line and the national guard joined the people and marched upon the Tuileries. Louis Philippe, feeling that all was lost, signed his abdication in favor of his grandson, the Count de Paris, and withdrew to St. Cloud.

The insurgents, however, paid no attention to this abdication. The Duchess of Orleans, with her little son, appeared in the chamber of deputies and besought

them to sustain the claim of her child to his grandfather's throne. The mob broke into the hall at this juncture, and she was compelled to seek safety in flight. The royal family fled to England, where they obtained an asylum. There Louis Philippe died on the 26th of August, 1850, at the age of seventy-seven years.

France a Republic.

On the 24th of February the republic was proclaimed, and a provisional government, consisting of Lamartine, Dupont de l'Eure, Arago, Ledru-Rollin, Marie, Garnier-Pages, and Cremieux, was installed. There was great danger that the revolution of 1848 would degenerate into a socialist insurrection, which would have plunged France into deeper misery and have drawn upon her the enmity of all Europe.

The eloquence of Lamartine secured the adhesion of the populace to the republic. The mob had already sacked the Tuileries, burned the throne, and raised the red flag. Moved by the appeals of Lamartine 100,000 national guards declared for the provisional government. The socialists were compelled to submit, and the better class of citizens, who dreaded a triumph of that party, gave their hearty support to the republic.

A new element now entered into the politics of the republic. Prince Louis Napoleon Bonaparte made a second attempt at revolution at Boulogne, in 1840. He was captured, and sentenced by the court of peers to imprisonment for life in the Castle of Ham. In May, 1846, he made his escape in the disguise of a workman, and sought refuge in England. He was now elected to the as-

sembly from the department of the Seine. The government declared its intention to prevent his return to France, and he resigned his seat.

A new election was ordered, and he was returned by five different departments. This decided manifestation of the popular will induced the government to withdraw its opposition. Louis Napoleon then crossed the channel, and on the 26th of September took his seat as a member for the department of the Seine. His name aroused the greatest enthusiasm among the French people, and without having done anything to deserve it, he found himself the most popular man in France. The cause of his popularity lay in the fact that he was the heir of the great emperor.

President Napoleon III.

Profiting by this popularity he announced himself a candidate for the presidency of the republic, and at the election on the 10th of December, 1848, was chosen president by a vote of 5,500,000 out of a total vote of 7,326,000, receiving a large majority over General Cavaignac and all his other competitors combined. On the 20th of December he entered upon the duties of his office, and took up his official residence at the palace of the Elysee.

The national assembly was divided into a number of parties. One of these supported the president; another was devoted to the interests of the legitimists; a third to those of the Orleans family; and a fourth consisted of the socialist deputies. With the exception of the first all of these were hostile to the president. The legitimist and Orleanist parties were plotting for the overthrow of the republic and the res-

toration of the monarchy; the socialists were busy working for the downfall of the republic and the inauguration of the reign of communism.

These parties hated each other intensely, and were united only in their enmity to the president. They wished to overthrow him first, and then settle their quarrels among themselves. this unhappy state of affairs the hopes of the nation rested upon the president. Seeing that the fall of the republic was inevitable, and knowing that neither of the contending parties possessed the confidence or represented the wishes of the French people, Louis Napoleon resolved to overthrow them all, seize the entire government, and appeal to the people to sustain him. His plans were laid with skill and carried out with boldness and decision.

Assembly Dissolved.

On the night of December 1, 1851, the leading members of the assembly were arrested, and the government printing-office was occupied by troops. Decrees and proclamations were struck off during the night for use on the morrow. The army was devoted to the president and readily aided him in carrying out this *Coup d' Etat*.

On the morning of December second the Parisians were astonished by proclamations from the president announcing that the national assembly was dissolved; that universal suffrage was restored; that a general election was ordered for the fourteenth of December; that Paris and the department of the Seine were placed under martial law.

the president. The legitimist and Orleanist parties were plotting for the overthrow of the republic and the reswould submit to the suffrages of the people a new constitution containing the following provisions: A responsible chief magistrate was to be chosen for ten years; the ministers were to be responsible to the president alone; a council of state was to originate laws, which were to be discussed and voted by a legislative chamber; and a senate was to be created, whose duty it should be to watch over the constitution and prevent infractions of it.

This constitution was submitted to the people on the twentieth of December, and was ratified by the votes of 7,500,000 Frenchmen. With the inauguration of the new government personal rule was re-established, and the experiment of constitutional government in France came to an end. The majority of the French people were satisfied with the change.

A Direful Panic.

In the meantime, however, the Royalists and Republicans of Paris, recovering from their surprise, took up arms against the president. An army of 48,-000 men was directed against them on the second and third of December, and their resistance was soon put down. On the fourth the troops, in a sudden and causeless panic, fired upon a crowd of unoffending citizens, killing large unmbers of them. Many prisoners were taken by the troops from the insurgents. These were put to death in crowds in the prisons, and 20,500 persons were banished to Cayenne.

It had been foreseen from the first that the president would not rest satisfied with the extension of his term of office. He was following in the footsteps of his uncle, the great emperor, whose heir he was, and the restoration | lected a large fleet and army at Sebas-

of the empire was the end of his schemes. At a grand banquet given to him at Bordeaux on the oth of October, 1852, the president foreshadowed his intentions in his memorable utterance, "The Empire is Peace."

On the twenty-first of November the electors were called upon to vote upon a plebiscite declaring Louis Napoleon Bonaparte hereditary Emperor of the French, with the right of regulating the order of succession to the throne in his family. It was accepted by 7,824,189 suffrages, to 253,145 against it. On the 2nd of December, 1852, the newly elected sovereign, who took the title of "Napoleon III., Emperor of the French," made his solemn entry into Paris. On the 29th of January, 1853, he married Eugénie Marie de Guzman, Countess of Teba, a lady of great beauty, and descended from one of the most illustrious families of Spain. By her he had one son, Napoleon Eugène Louis, born March 16, 1856.

French and English Alliance.

The first effort of the new emperor was to gain the moral support which would result from an alliance with Great Britain. In order to effect this alliance he adopted the English policy concerning the Eastern question. Early, in 1853 the Czar of Russia, believing that the Turkish empire in Europe was hastening to its fall, made secret overtures to the British government to join him in a division of the dominions of the sultan. The proposals were rejected, and England gladly availed herself of the proffered alliance of France.

Matters were not long in coming to a The Emperor Nicholas coltopol, and sent Prince Mentschikoff to Constantinople to demand of the sultan larger powers of control over the holy places of Syria and Palestine, and a protectorate over all the Greek Christians within the Turkish dominions. This would have made him the sovereign of the majority of the sultan's subjects. A few weeks later the Russian armies occupied the Turkish provinces of Moldavia and Wallachia.

The Turkish government was panicstricken, and but for the firmness of Lord Stratford de Redcliffe, the British ambassador, who assured the sultan of the support of his government, would have yielded to the Russian demand. He encouraged the sultan to resist the unreasonable demands of the czar, and in the meantime a congress of the plenipotentiaries of Austria, Prussia, France and England met at Vienna, and endeavored to settle the difficulty by negotiations.

War with Russia.

Their efforts failing, the sultan declared war against Russia in October, 1853. The Turkish army under Omar Pasha at once crossed the Danube, and defeated the Russians at Oltenitza. In January, 1854, the Russians were repulsed in a four days' assault upon the Turkish lines at Kalafat, and retreated. On the 30th of November, 1853, a Russian fleet from Sebastopol made a descent upon Sinope, destroyed a Turkish squadron in the harbor, and bombarded the town, killing 4,000 people.

The French and English governments now demanded that the czar should withdraw his troops from the Turkish territory. Nicholas refused to answer this note, which informed him

that his failure to reply would be taken as a declaration of war. In March, 1854, France and England entered into a close alliance with each other and with Turkey, and declared war against Russia. The Russian army under Prince Paskiewitch laid siege to Silistria, in April, but the Turks defended the place with such vigor that the siege was raised in about a month. A little later the Russians were defeated by the Turks at Giurgevo, and abandoned the Danubian provinces and retreated into their own country.

Heights of Alma Stormed.

By this retreat the cause of the intervention of France and England was removed. They resolved, however, to break the power of Russia in the Black Sea by destroying the fortifications of the great stronghold of Sebastopol, the chief town of the Crimea. A combined expedition was despatched to the Crimea, and the troops were landed near the mouth of the river Alma. The next day, September 20, 1854, the Russian position on the heights above that stream was stormed and carried after a gallant resistance.

The allies now advanced upon Sebastopol, the fleet following along the coast and occupied the port of Balaklava. Sebastopol was immediately invested. The town was defended by the Russian General Todleben, and its resistance of nearly a year is one of the most memorable events in history. The siege was in reality a blockade, as the Russians were able during the whole time to maintain communication with their country north of the city. They made several vigorous attempts to break up the investment.

On the 25th of October, 1854, the

buttle of Balaklava was fought for this purpose. It was made memorable by a heroic but fruitless charge of the English "Light Brigade" of cavalry upon the Russian artillery. On the 5th of November the Russians hurled a heavy orce upon the English lines at Inkermann, but were held in check until the arrival of a reinforcement of French troops made the victory sure for the allies. Still later, on the 16th of August, 1855, the Russians made their last attempt in the stubbornly fought battle of the Tchernaya, to raise the siege, but were repulsed. Sardinia had by this time joined the alliance of France and England, as has been related, and the Piedmontese troops won great credit in this last battle.

Fall of Sebastopol.

On the 8th of September, 1855, the French stormed and carried the Malakoff Tower, the key to the Russian defences, and the English at the same time carried the important work of the Great Redan. These successes cost the allies heavily, but resulted in the evacuation of Sebastopol by the Russians. The city was occupied by the allies, the Russians retiring to the forts north of the harbor.

In the meantime the English and French fleets had entered the Baltic and Polar Seas, and had inflicted considerable loss upon the Russians in those quarters. Previous to the fall of Sebastopol a British fleet entered the Sea of Azov and captured Kertch and Venikale.

These disasters of Russia were partly atoned for by the success of her forces in the Trans-Caucasian provinces. Kars was taken by the Russian army after a

heroic resistance and other conquests of importance were made.

The Mexican republic was debtor to certain citizens of France, England, and Spain, and resisted every effort of those powers to collect their claims. The debt to these three powers was about \$73,000,000, of which \$263,490 were due to France. Finding it impossible to collect their claims by negotiation, the three governments in 1861 arranged a joint expedition to Mexico, to compel her to make provision for payment. France from the first determined to make this expedition the means of acquiring a footing in Mexico, which should lead to the conquest of that country, and the establishment of a Latin empire in America. The scheme was in reality a revival in another form of the old French dream of a great American dominion.

The French in Mexico.

The expedition consisted of eightyone vessels, carrying 1,611 guns and
27,911 sailors and troops. It reached
Vera Cruz in December, 1861. The
eity and its defences were evacuated by
the Mexicans, and were occupied by
the Spanish troops. In the early part
of the year 1862 England and Spain,
having become convinced of the designs
of France, arranged their difficulties
with Mexico by the convention of Solidad, signed on the 15th of February,
and in April withdrew their forces from
the expedition.

Left alone, France reinforced her army, and placed it under command of General Forey. During the remainder of the year 1862 the French were put to great exertions to hold their own against the Mexicans. In March, 1863, having

been reinforced from France, General Forey laid siege to Puebla, which was defended with great gallantry by the Mexicans, and captured it on the 18th of May, after a siege of two months. The Mexicans had based their hopes of saving the capital upon the defence of Puebla, and made no effort to defend the city of Mexico, which was entered by the French army on the 10th of June, 1863.

The Emperor Napoleon now proceeded to carry his designs respecting Mexico into execution. A council of notables was summoned, and under a controlling French influence declared in favor of the abolition of the republic, and the establishment of a hereditary empire as the best form of government for the country. The notables subsequently chose the Archduke Maximilian, the brother of the Emperor of Austria, to be Emperor of Mexico. These acts were submitted to the vote of the Mexican people, who, under the intimidation of the French, ratified them.

Our Country Intervenes.

In 1866, the Civil War in the United States being ended, the American government, which had viewed the course of France in Mexico with avowed displeasure, demanded of the Emperor Napoleon the withdrawal of his troops from Mexico. After some hesitation Napoleon consented to comply with this demand, and the withdrawal of the French troops was begun towards the close of 1866, the result being that Maximilian was betrayed by one of his Mexican generals, was captured and shot on June 19, 1867.

Alarmed at the rapid increase of the power of Frussia, the Emperor Napo-

leon, through M. Benedetti, his minister at Berlin, demanded the transfer to France of the territory on the left bank of the Rhine as a compensation to France for the great growth of the Prussian power. Count Bismarck met the demand with firmness and immediately pronounced it "inadmissible." It was at once withdrawn.

Scheme to Annex Belgium.

France then proposed to Prussia a scheme for the annexation of Belgium to France, and declared that if Prussia would support her in it, she in her turn would support Prussia in the subjection of south Germany to the rule of that power. Bismarck gave no definite answer to this proposition, but laid Count Benedetti's draft of the proposed treaty among the Prussian archives. Emperor Napoleon then attempted to purchase the duchy of Luxembourg from Holland. The Dutch king, who was greatly in need of money, was anxious to sell, but the scheme was foiled by Bismarck, who claimed Luxembourg as a part of the old German Confederation, and garrisoned it with Prussian troops. The North German Confederation protested against the sale, and the transaction was discontinued.

These diplomatic defeats seriously damaged the prestige of France. A considerable party was anxious to go to war with Prussia, but the emperor wisely refused to comply with their demand. The French army was inferior to that of Prussia, and had not yet adopted the breech-loading gun, without which it would have been folly to attack a power as well equipped as Prussia. As it was believed that a struggle with Prussia was inevitable, the work of reorganiz-

ing the French army was pushed forward with vigor.

Since the establishment of the empire, France had made a great gain in material prosperity. The eighteen years of Napoleon's rule were the most prosperous period the nation had ever experienced. The administrative talents of the emperor were second only to those of the great Napoleon, and under his liberal policy the French commerce was carefully built up, the railroad system of the country was extended, and the manufacturing and mining interests were expanded. The principal cities of the empire were enlarged, improved, and beautified, and Paris was made the most splendid capital of Europe.

War with Prussia.

In the spring of 1870 the Spaniards endeavored to secure a king, their throne having been left vacant by the revolution of 1868. France was anxious that the young Prince of Asturias, the son of Oueen Isabella, should be chosen; but the choice of the Spaniards fell upon Prince Leopold of Hohenzollern-Sigmaringen, a distant relative of the King of Prussia. This selection was opposed by France, and was made the pretext for a war with Prussia. The Emperor Napoleon was by no means anxious for war, but was forced to yield by the popular clamor and the importunities of the empress and his counsellors.

At this juncture Count Bismarck published the draft of the secret treaty which M. Benedetti had proposed to him for the acquisition of Belgium by France. This publication aroused a great deal of indignation towards France in Europe, especially in Great Britain, which had constituted herself

the special guardian of Belgian independence. The British government demanded of Napoleon ample guarantees for the observance by France of the neutrality of Belgium in the struggle at hand. Wat was at once declared against Prussia. The hope which the French government had entertained of separating south Germany from the northern federation was destroyed by the prompt action of the south German states in support of Prussia.

Soon after the declaration of war the emperor appointed the Empress Eugénie regent during his absence, and repaired with the prince imperial to Metz. There he found the French army but imperfectly prepared for the struggle before it, notwithstanding the assertion of his minister of war that every preparation was complete.

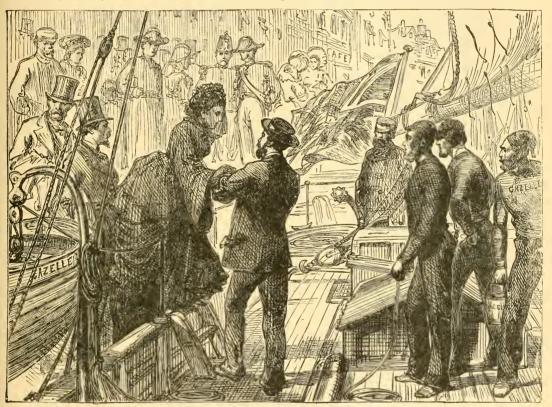
French Armies Defeated.

The news of the first French disasters plunged Paris into great despondency. The senate and corps legislatif were convened by the empress on the ninth of August, and the Ollivier ministry was forced to resign. A new ministry, under Count Palikao, succeeded it. General Trochu, who was regarded as an able soldier, was appointed governor of Paris, and measures were pushed forward for the defence of the city.

The news of the surrender of the emperor and MacMahon's army at Sedan aroused a storm of excitement at Paris. The streets were filled with a wild throng of citizens and national guards, who surrounded the palace of the corps legislatif, and demanded the overthrow of the Bonapartes. Jules Favre, in the legislative chamber, declared that the empire had ceased to exist, and accom-

panied by a number of republican deputies repaired to the Hotel de Ville, and organized a provisional government, consisting of MM. Arago, Cremieux, Favre, Ferry, Gambetta, and others.

The mob attacked the Tuileries, but met with no resistance. The empress, deserted by all her attendants but one, and by every domestic, was saved by mand was refused by the French government, which declared that it would not give up "an inch of its land or a stone of its fortresses." M. Thiers, though seventy-three years old, made a journey to the courts of England, Russia, Austria, and Italy, to ask the mediation and moral support of those powers in behalf of France—but with-



ESCAPE OF THE EMPRESS EUGENIE FROM FRANCE.

the timely arrival of a devoted friend, Dr. Evans, an American, who enabled her to escape to England, where she was joined by the prince imperial.

The provisional government was anxious to make peace with Germany, but the King of Prussia demanded the cession of Alsace and Lorraine, which had been partly overrun by his armies, as the price of peace. The de-

out success. In the meantime the Germans advanced to Paris, and invested the city. Communication between the capital and the provinces was maintained by means of balloons.

M. Gambetta, a member of the provisional government, escaped from Paris in a balloon, and reached Orleans in safety. He at once began to prepare the provinces for resistance, and in or

der to accomplish his ends assumed dictatorial powers. His efforts were liberally responded to by the nation, and several new armies were placed in the field, but the German troops steadily advanced from victory to victory.

In January, 1871, the city and outlying forts of Paris were surrendered to the Germans. An armistice of three weeks was entered into in order to give the French people an opportunity to organize a government competent to conclude a general peace. The new government at once addressed itself to the task of concluding a treaty of peace with the victors, and on the 26th of February the preliminaries of peace were signed at Versailles. With the exception of a garrison of 40,000 men in Paris, all the French troops retired south of the Loire. On the 1st of March a detachment of the German army entered Paris, but withdrew from the city on the 3d.

Anarchy Triumphant.

In the confusion which followed the surrender of Paris, the national guards were masters of the city. They seized a large number of cannon, and carried them to the heights of Montmartre, where they entrenched themselves. General Vinoy, commanding the garrison of the city, attempted to dislodge them, but without success. Vinoy then withdrew his troops to Versailles for the protection of the assembly, and the insurgents occupied the Hotel de Ville, and organized a government which took the name of the "Commune."

It declared itself the champion of municipal freedom, and might have accomplished much for the cause, but unhappily the "commune" now passed out of the hands of its moderate meanbers into those of the revolutionary or socialist element which had given such trouble in 1848, and had been held down by the empire. The worst elements of the city came into power within the walls, robbed the banks, arrested imprisoned, or put to death the good men who sought to control them, and declared that Paris should be destroyed if they could not hold it.

Paris Again Besieged.

A reign of terror ensued, and the forces of the government, under the command of Marshal MacMahon, which held possession of the majority of the outer forts, invested the city, and subjected it to a second siege. Several severe battles were fought between the troops of the government and those of the commune, and though the latter were routed with great loss, they held the city with such obstinacy that the government was forced to ask leave of Germany, to increase its army north of the Loire.

Paris suffered in this siege more than it had during the German bombardment. The government forces made steady progress, and at length the outer forts were entirely in their possession. As their final defeat became apparent the communists avenged themselves by overturning the Napoleon column in the Place Vendome.

On the 21st of May the government troops forced their way into the city, and during the night the communists prepared for their last resistance. For the next eight days a desperate struggle was waged for the possession of the city. The communists contested every foot of ground, and as they were beaten back

inurdered the venerable Archbishop of Paris and a number of other hostages, and set fire to the Louvre, the Tuileries, the Hotel de Ville, and a number of other public buildings.

An effort was made to burn the city, but was defeated by the government troops. At length, on the twenty-eighth and twenty-ninth, the last positions of the communists were stormed and the maurrection was at an end. Immense numbers of the insurgents of both seless were shot down by the troops during the fighting, and thousands of prisoners were taken. Multitudes of these were shot by order of the court-martial at Versailles for participation in the insurrection. These military executions continued until the world was sick of them.

On the 10th of May, 1871, the definite treaty of peace was signed at Frankfort between France and Germany.

The Immense Debt Paid.

The revolt of the commune being over, the government devoted itself energetically to the task of restoring the prosperity of the country and putting an end to the occupation of the provinces by the Germans. By the terms of the treaty of Frankfort, the sum of 5,000,000,000 francs, or \$1,000,000,000, was to be paid to Germany as an indemnity. This immense sum was to be paid by instalments ranging over three years.

As security for the debt, the German army was to occupy, at the expense of France, the greater part of the territory which it had overrun; but the departments were to be successively evacuated, in a specified order, as the instalments were paid. The first effort of the government was to raise a loan of \$400,-\$00.000, which enabled it to pay during

the month of June three instalments of the German debt, and thus to secure the evacuation of the Paris forts and a considerable portion of the territory held by the Germans.

This gained for the government of President Thiers the hearty support of the nation, and the co-operation of the assembly. After the adjournment of the assembly in September, M. Thiers, made satisfactory arrangements for the payment of the fourth half milliard of the German debt in the ensuing spring, and so restricted the German occupation to six of the eastern departments.

Germans Sent Home.

M. Thiers also succeeded in perfecting arrangements by which the whole of the German debt was discharged, and the country entirely evacuated by the foreign army, in the early part of September, 1873, a year and a half in advance of the time fixed by the treaty of Frankfort The money for this purpose was raised by means of popular loans which were readily taken by the French people, who cordially sustained the president's efforts to rid the country of the presence of the conquerors.

During the latter part of the summer of 1871 the title of M. Thiers was changed from "Chief of the Executive Power" to that of "President of the French Republic."

On the 9th of January, 1873, the ex-Emperor Napoleon III. died at Chiselhurst, in England, where he had resided since his release from captivity. His death was sincerely regretted by the French people, to whom, in spite of his many faults, he had been a wise and generous friend. By the death of the ex-emperor the plans of the imperialist party in France were for the time entirely overthrown.

The government now felt itself strong enough to proceed with the trial of Marshal Bazaine for the loss of Metz during the war with Germany. He was charged with treason in surrendering his army and the fortress of Metz without sufficient cause; and on the 10th of December was found guilty by the court-martial, and was sentenced to death. His sentence was commuted by President MacMahon to degradation from his rank and twenty years imprisonment. He was confined in the fortress of the island of St. Marguerite, but succeeded in escaping from it during the summer of 1874.

Brilliant Statesman Dead.

In 1879 M. Jules Grévy was elected president of the republic by the assembly. The choice for president of the assembly fell on Gambetta, who, after an almost unexampled career of popularity, died December 31, 1882, and thereby was removed the most brilliant statesman and strongest personal force in the councils of the nation. Owing to the scandals connected with the sale and purchase of decorations, President Grévy resigned in November, 1887, and M. Carnot was chosen as his successor.

At Lyons, on June 24, 1894, President Carnot was assassinated by an Italian anarchist. Great excitement prevailed throughout the country. The Senate and House of Representatives at Washington adjourned in honor of the French president. On June 27th the National Assembly elected M. Casimir-Perier to be the successor of President

Carnot. The new president retained his office but a short time. On January 15, 1895, he resigned, and on the seventeenth of the same month, M. Francois Felix Faure was elected to be his successor. On account of the sudden death of President Faure, whose administration of affairs was successful, the distinguished Loubet was appointed president by the National Assembly.

Famous Dreyfus Trial.

In 1897 Captain Dreyfus, an officer in the French army, was accused and tried for treason, and was convicted. The specific charge was the sale of government secrets to German officials concerning the equipments and movements of the French army. Drevfus was sentenced to imprisonment for life. It was believed by many distinguished persons that he was not the real culprit, and that the fact of his being a Jew would account for the charge being laid upon him that should properly have been attached to others. Emile Zola, the celebrated author, espoused his cause with great ardor and was himself tried for charges made against the French military authorities, and convicted and sentenced to pay a fine.

The injustice done to Dreyfus would not slumber. The case was reopened and after a most exciting trial in the summer of 1899, he was again convicted by a military tribunal, but with a recommendation to mercy. By this verdict the military power shielded itself, and, by a swift pardon from President Loubet, Dreyfus was restored to his position in the army and was relieved of the charges brought against him.

CHAPTER XI.

The New German Empire.

N common with all the rest of Europe Germany was disturbed and deeply agitated by the ambitious schemes of Napoleon at the beginning of the nineteenth century. Francis II. came to the throne in 1792, and after a series of defeats by the armies of the French Republic, and the adhesion, in 1805, of many of the German princes to the alliance of France, which led to the subsequent formation of the Rhenish Confederation under the protectorate of Napoleon, resigned the German crown, and assumed the title of Emperor of Austria.

From this period till the Congress of Vienna, 1814–15, Germany was almost entirely at the mercy of Napoleon, who deposed the established sovereigns, and dismembered their states in favor of his partisans and dependants, while he crippled the trade of the country, and exhausted its resources by the extortion of subsidies or contributions.

The second peace of Paris, in 1814, restored to Germany all that had belonged to her in 1792, and as a reconstruction of the old empire was no longer possible, those states which still maintained their sovereignty combined, in 1815, to form a German Confederation. Of the three hundred states into which the empire had once been divided there now remained only thirty-nine, a number which was afterwards reduced to hirty-five by the extinction of several petty dynasties.

The diet was now reorganized, and appointed to hold its meetings at Frank-fort-on-the-Main, after having been for-

mally recognized by all the allied states as the legislative and executive organ of the confederation; but it failed to satisfy the expectations of the nation, and soon became a mere political tool in the hands of the princes, who simply made its decrees subservient to their own efforts for the suppression of every progressive movement.

New Government Organized.

The festival of the Wartburg, and the assassination of Kotzebue, were seized as additional excuses for reaction: and though the French Revolution of 1830 so influenced some few of the German States as to compel their rulers to grant written constitutions to their subjects, the effect was transient, and it was not till 1848 that the German nation gave expression, by open insurrectionary movements, to the discontent and the sense of oppression which had long possessed the minds of the people. The princes endeavored by hasty concessions to arrest the progress of republican principles, and, fully recognizing the inefficiency of the diet, they gave their sanction to the convocation, by a provisional self-constituted assembly, of a national congress of representatives of the people.

Archduke John of Austria was elected Vicar of the newly-organized national government; but he soon disappointed the hopes of the assembly by his evident attempts to frustrate an energetic action on the side of the parliament, while the speedy success of the anti-republican party in Austria and Prussia damped

the hopes of the progressionists. The refusal of the king of Prussia to accept the imperial crown which the parliament offered him in 1849, was followed by the election of a provisional regency of the empire; but as nearly half the members had declined taking part in these proceedings, or in a previous measure, by which Austria had been excluded, by a single vote, from the German Confederation, the assembly soon lapsed into a state of anarchy and impotence, which terminated in its dissolution.

Insurrections Suppressed.

The sanguinary manner in which insurrectionary movements had in the meanwhile been suppressed by Prussian troops both in Prussia and Saxony put an effectual end to republican demonstrations; and in 1850 Austria and Prussia, after exhibiting mutual jealousy and ill-will which more than once seemed likely to end in war, combined to restore the diet, whose first acts were the intervention in Sleswick-Holstein in favor of Denmark, and the abolition of the free constitutions of several of the lesser states.

From that period the diet became the arena in which Austria and Prussia strove to secure the supremacy and championship of Germany; every measure of public interest was made subservient to the views of one or other of these rival powers; and the Sleswick-Holstein difficulties were the principal questions under discussion in the federal parliament, down to the rupture between Prussia and Austria, and the dissolution of the Bund in 1866.

The immediate occasion of the war of 1866 was the difference that arose

between Prussia and Austria, after the convention of Gastein, 1865, as to the occupation and disposal of the territory taken from Denmark in the short war of 1864. But the real grounds lay in that rivalry between the two states for the leadership of Germany which has shown itself at many epochs of their history. There can be little doubt that the feeling of the German people, as distinguished from the princes and bureaucracy, had, in recent times at least been in favor of the purely German Prussia as their leader, rather than Austria.

And when the parliament of Frankfort, in 1849, offered the imperial crown to the king of Prussia, the unity of Germany might have been secured without bloodshed, had the monarch been less scrupulous, or had he had a Bismarelfor his adviser. But that opportunity being let slip, and the incubus of the "Bund" being restored, it became apparent that the knot must be cut by the sword.

Austria and Prussia.

By the treaty of Gastein Austria and Prussia agreed to a joint occupation of the Elbe duchies; but to prevent collision it was judged prudent that Austria should occupy Holstein, and Prussia Sleswick. Already a difference of policy had begun to show itself: Prussia was believed to have the intention of annexing the duchies; while Austria began to favor the claims of Prince Frederick of Augustenburg. meantime, both nations were making ready for the struggle; and Italy, looking upon the quarrel as a precious opportunity to strike a blow for the liberation of Venetia, had secretly entered into an alliance with Prussia.

In the sitting of the German diet, June 1, 1866, Austria, disregarding the convention of Gastein, placed the whole matter at the disposal of the Bund, and then proceeded to convoke the states of Holstein "to assist in the settlement of the future destiny of the duchy." Prussia protested against this as an insult and a violation of treaty; demanded the re-establishment of the joint occupation; and, while inviting Austria to send troops into Sleswick, marched troops of her own into Holstein.

"Act of Violence."

Instead of responding to this invitation, Austria withdrew her forces altogether from Holstein, under protest; and then, calling attention to this "act of violence" on the part of Prussia, proposed that the diet should decree "federal execution" against the enemy of This eventful resolution the empire was carried by a great majority on the 14th of June, 1866; Hanover, Saxony, Hesse-Cassel and Hesse-Darmstadt voting for it. The resolution having passed, the Prussian plenipotentiary, in the name of his government, declared the German Confederation dissolved for ever, and immediately withdrew.

Thereupon identical notes were sent by Prussia to the courts of Saxony, Hanover and Hesse-Cassel. The terms were not accepted, and the Prussian troops at once took military possession of the three kingdoms without resistance. War was now declared against Austria; the Prussian host, numbering in all 225,400 men, with 774 guns, invaded Bohemia at three several points. The Austrians, who had been surprised in a state of ill-organized unreadiness, had assembled an army of 262,400 men

and 716 guns; and the greater portion of these were stationed, under General Benedek, behind the Riesengebirge, expecting the attack from Silesia.

The Prussian armies in the meantime crossed the Erzgebirge without opposition, drove the Austrian army steadily and quickly back with heavy losses, and after effecting a junction moved steadily forward to meet the Austrian army, now concentrated between Sadowa and Koniggratz. Here, on July 3d, was fought the decisive battle. The Austrian cavalry made heroic efforts to turn the tide of victory; but the stern, trained valor of the Prussians, armed with the till then little known breech-loading "needle-gun," was invincible, and the Austrian army was broken and dissolved in precipitate flight.

Disastrous Defeat.

The Prussians lost upwards of 9000 killed and wounded; the Austrian loss was 16,235 killed and wounded, and 22,684 prisoners. After this decisive defeat, which is known as the battle of Koniggratz or Sadowa, all hope of staying the advance of the Prussians with the army of Benedek was at an end; a truce was asked for, but refused; and not till the victorious Prussians had pushed forward towards Vienna, whither Benedek had drawn his beaten forces, was a truce obtained through the agency of the emperor of the French. Italy, though more than half-inclined to stand out for the cession by Austria of the Trentino, as well as Venetia, reluctantly agreed to the armistice, August 12th.

A brief campaign sufficed for the defeat of the minor states of Germany that had joined Austria—viz., Bavaria, Wurtemberg, Baden and Hesse-Darm-

stadt; and after peace had at last been arranged, some of them were forced to submit to a certain loss of territory. Saxony only escaped incorporation with Prussia through the resolute opposition of Austria supported by France: but the little kingdom, like all the other states that had taken arms against Prus-

burg; and the other states north of the Main were united with Prussia in a confederacy of a more intimate nature than before existed, called the North German Confederation.

Austria, by the treaty of Prague, August 20, 1866, was completely excluded from participation in the new



BATTLE OF KONIGGRATZ, OR SADOWA.

sia, was forced to pay a heavy war indemnity. Even the little principality of Reuss had to pay 100,000 thalers into the fund for Prussian invalids.

The states north of the Main which had taken up arms against Prussia were completely incorporated—viz., Hanover, Hesse-Cassel, Nassau, Frankfort and a small portion of Hesse-Darmstadt, as vell as Sleswick-Holstein and Lauen-

organization of the German states, and formally agreed to the surrender of Venetia to Italy, to the incorporation of Sleswick-Holstein with Prussia, and to the new arrangements made by Prussia in Germany. A portion of the fifth article of this treaty secured that, if the "inhabitants of the northern districts of Sleswick declare, by a free vote, their desire to be united to Denmark, they

shall be restored accordingly;" but this was withdrawn in 1878 by secret treaty between Austria and Germany. Though losing no territory to Prussia, Austria had to pay forty millions of thalers for the expenses of the war.

The North German Confederation, as thus constituted, possessed a common parliament, elected by universal suffrage, in which each state was represented according to its population. The first or constituent parliament met early in 1867, and adopted, with a few modifications, the constitution proposed by Count Bismarck. The new elections then took place, and the first regular North German parliament met in September, 1867.

Union of German States.

According to this constitution, there was to be a common army and fleet, under the sole command of Prussia; a common diplomatic representation abroad, of necessity little else than Prussian; and to Prussia also was entrusted the management of the posts and telegraphs in the Confederation.

The southern German states which up to this point had not joined the Bund were Bavaria, Baden, Wurtemberg, Hesse-Darmstadt and Liechtenstein, with a joint area of 43,990 square miles, and a total population of 8,524,460. But, though these states were not formally members of the Bund, they were so practically, for they were bound to Prussia by treaties of alliance offensive and defensive, so that in the event of a war the king of Prussia would have at his disposal an armed force of upwards of 1,100,000 men.

During the next few years the North German Confederation was employed in

consolidating and strengthening itself, and in trying to induce the southern states to join the league. The commercial union was remodeled and extended, until by the year 1868 every part of Germany was a member of it, with the exception of the cities of Hamburg and Bremen, and a small part of Baden. This paved the way for the formal entrance of the southern states into the confederation; but they still hung back, though the ideal of a united Germany was gradually growing in force and favor.

Impending War.

In the spring of 1867 a war between Prussia and France seemed imminent, from difficulties arising out of the occupation of Luxemburg by the former; but by the good offices of the British government a congress of the great powers, Italy included, was assembled in London, at which an arrangement satisfactory to both nations was amicably agreed upon, Luxemburg remaining in the possession of the king of Holland. It was evident, however, that hostilities had only been postponed, and on both sides extensive military preparations were carried on.

In 1870 the long-threatened war between Prussia and France broke out. On July 4th of that year the provisional government of Spain elected Prince Leopold of Hohenzollern, a relative of King William of Prussia, to fill their vacant throne. This step gave the greatest umbrage to the French government; and though, by the advice of William I. of Prussia, Prince Leopold resigned his candidature, it was not satisfied, but demanded an assurance that Prussia would at no future period sanction his claims.

This assurance the king refused to give; and on the 19th of July the emperor of the French proclaimed war against Prussia. Contrary to the expectation of France, the southern German states at once decided to support Prussia and the northern states, and placed their armies, which were eventually

Germans were splendidly organized, and much superior in number. The result was that the French, instead of marching to Berlin as they anticipated, never crossed the Rhine, and had to fight at a disadvantage in Alsace and Lorraine.

On August 2d the French obtained some trifling success at Saarbruck, but



THE BATTLE OF GRAVELOTTE.

commanded by the Crown-prince of Prussia, at the disposal of King William.

By the end of July the forces of both countries were congregated on the frontier. Napoleon, however, lost a fortnight in delays after the declaration of war, and it was discovered that the French army was by no means in a state of satisfactory preparation, while the

the rapidly following battles of Weissenburg, August 4th, Worth and Spicheren, both August 6th, were important German victories. The German advance was hardly checked for a moment, though the losses on both sides were very heavy. The battle of Gravelotte, in which King William commanded in person, was fought on the 18th; and though the Germans suffered immense

loss, they were again victorious, and forced Bazaine to shut himself up in Metz.

The Emperor Napoleon and Marshal MacMahon in vain attempted to proceed to the relief of Bazaine. They were surrounded at Sedan, and completely defeated with heavy loss. The emperor surrendered on the 2d of September, with his whole army, about 90,000 men, and was sent as a prisoner into Germany. By the 19th of September the Prussians had reached Paris, and commenced a vigorous siege. Strasburg capitulated on the 27th after a severe bombardment; and on October 28th Bazaine surrendered Metz with an army of 6000 officers and 173,000 men, 400 pieces of artillery, 100 mitrailleuses and 33 eagles. Verdun capitulated on the 8th of November; Thionville followed on the 24th; after which there were several capitulations of lesser importance.

Succession of Defeats.

The French made extraordinary efforts to raise armies and relieve Paris, but with the exception of a momentary gleam of success on the Loire, they met with nothing but severe defeats. Of these may be mentioned the battle of December 3d in the Forest of Orleans, and that of Le Mans, January 12th, in which contests Prince Frederick-Charles book altogether 30,000 prisoners.

After numerous unsuccessful sorties, and enduring great sufferings from famine, Paris surrendered on the 29th of January, and the war was virtually at an end. The French army of the East, 80,000 strong, under Bourbaki, was compelled to retire to Switzerland on the 31st. By the peace of Frankfort,

May 10, 1871, France was condemned to pay a heavy war indemnity, and the province of Alsace, along with the German part of Lorraine, was ceded to Germany.

A very important result of the war was to complete the fusion of the northern and southern states of Germany. The southern states joined at once in the war against France; in November of 1870, Baden and Hesse leading the way, they all became members of the German Confederation; and next month the re-establishment of the German empire was almost unanimously resolved, with the king of Prussia as hereditary emperor. It was at Versailles, on the 18th of January, 1871, that the king was proclaimed emperor of Germany.

Empire of Prussia.

The new German empire set vigorously to work to organize itself as a united federation, under the skillful leadership of Prince Bismarck, who was appointed Reichskanzler or Imperial Chancellor. Almost at once it found itself involved in the ecclesiastical contest with the Church of Rome, known as the "Kulturkampf," which had previously begun in Prussia. The origin of the struggle was an effort to vindicate the right of the state to interfere, somewhat intimately, with the behavior, appointments, and even educational affairs of all religious societies in the country.

The Jesuits were expelled in 1872, and Pope Pius IX. retorted by declining to receive the German ambassador. The famous Falk or May Laws were passed in Prussia in 1873-4-5, and some of their provisions were extended to the empire. Several German prelates, re-

fusing obedience, were expelled from Germany; and the disorganization in ecclesiastical affairs became so serious that the Reichstag passed a law in 1874 making marriage a civil rite. Pope issued an encyclical declaring the Falk laws invalid, and matters seemed for a time to be at a deadlock.

Prussia and the Papacy.

On the election of a new pope, Leo XIII., in 1878, attempts were made to arrange a compromise between the empire and the papal see. Falk, the Prussian "Kultus"-minister, resigned in 1879, and certain modifications were made in the obnoxious laws in 1881 and 1883. Bismarck took a further step towards Canossa in 1885, when he proposed the pope as arbiter between Germany and Spain in the dispute as to the possession of the Caroline Islands; and he practically owned himself beaten in the concession which he granted in revisions of the politico-ecclesiastical legislation in 1886 and 1887. Another semi-religious difficulty which demanded government interference was the social persecution of the Jews, which reached a climax in 1880-81.

In more strictly political affairs the rapid spread of socialism excited the aların of the government. tempts on the life of the emperor, in May and June, 1878, were attributed more or less directly to the Social Demoerat organization, and gave the signal for legislative measures, conferring very extensive powers upon the administration to be used in suppressing the influence of socialism. These socialist laws. though limited in duration, have invariably been renewed (sometimes with added stringency) before their validity however, either in Africa or the Pacific

expired; in 1889 several of the most important towns of the empire were in what is called "the minor state of siege" for police purposes, and a new permanent socialist law was proposed by the government in October of that year.

A plot, happily futile, to blow up the emperor and other German rulers at the inauguration of the National Monument in the Niederwald in 1883 was considered by the government to justify its repressive measures. Prince Bismarck, however, was not content with repressive measures; he endeavored by improving the condition of the working-classes to cut the ground from beneath the feet of the socialistic propagandists.

Laws for the Working-Classes.

The acknowledgment in the emperor's message to the Reichstag, in 1881, that the working-classes have a right to be considered by the state, was followed by laws compelling employers to insutheir workmen in case of sickness and of accident, and by the introduction, 1888, of compulsory insurance for workmen against death and old age-measures that have been by some call d "state-socialism."

The energetic commercial policy of government also, which since 1879 has been strongly protectionist, had its springs in similar considerations; and the colonial policy, which began in 1884 with the acquisition of Angra Pequeña, may be considered to be stimulated partly by the desire to gratify the national self-respect, and partly to provide new outlets under the German flag for the surplus population, and new markets for the home manufactures.

None of the German colonies as yet.

Ocean, have proved of any great commercial value. The assembling of the Congo Congress at Berlin, in 1885, fitly marked Germany's admission to the list of colonial powers. On the maintenance and improvement of the army and navy the German government has bestowed the most unremitting care, urged especially by the attitude of the "Revanche" party in France, though hitherto the imperial policy has been entirely pacific.

The National Army.

Considerable parliamentary friction has been caused more than once by the unwillingness of the Reichstag to vote military supplies to the amount and in the manner demanded. The national parliament seeks to exercise a constitutional control over the army. A compromise was effected in 1874, in virtue of which the military strength was fixed and the supplies granted for periods of seven years at a time. In 1886 the government proposed to terminate the current Septemate in 1887 instead of 1888, and to immediately add largely to the peace strength of the army.

On the rejection of the bill the Reichstag was dissolved January, 1887, by the emperor, and an appeal made to the country. The Iron Chancellor, Bismarck, still possessed the confidence and the gratitude of the people, and the new elections in February, 1887, resulted in a crushing defeat for the opponents of the government, notably the Freisinnige and the Social Democrats. One of the most remarkable features of this election was a letter written by the Pope in favor of the army bill, for which he subsequently received a quid pro quo in a further modification of the May

laws. The Military Septennate Bill was immediately passed, and was followed in 1888 by a Military Organization Bill which made several changes in the conditions of service in the landwehr. The subsequent budgets showed an enormous increase in the extraordinary military expenditure. While thus seeking peace by preparing for war, Germany had not failed to use diplomacy for the same end.

A personal meeting of the emperors of Germany, Austria and Russia, in 1872, was considered a proof of a political alliance, and, when Russia drifted somewhat apart from Germany in 1878, an offensive and defensive alliance was formed between Austria and Germany in 1879. Italy afterwards entered this Triple Alliance. Germany's influence on the Eastern Question was recognized in 1878, when the plenipotentiaries of the powers met at the Congress of Berlin.

A New Emperor.

On the 9th of March, 1888, the Emperor William I. died. His son Frederick, at that time suffering from a cancerous affection of the throat, immediately issued a proclamation, in which he promised to consider "new and unquestionable national needs," and it was understood, and to some extent felt that a more liberal era had commenced. The new emperor, however, died on June 15th, and William II., his son, who succeeded, at once recurred to the policy of William I. and Prince Bismarck. Much painful excitement was caused by a medical dispute as to the nature and cause of the late emperor's fatal illness, which speedily developed into a party question, discussed on both sides with virulent acrimony. The latter part of

1888 and the year 1889, were devoted by the young emperor to visiting the courts of several of his fellow-sovereigns in Europe. Germany continued to extend her colonial empire, not, however, without coming to blows with the natives; and in Samoa became temporarily involved in hostilities with one of the chiefs. Difficulties on the east coast of Africa led in 1888 to a blockade by the British and German fleets to prevent the importation of arms and to check the slave-trade. This lasted until October, 1889.

Prince Bismarck and his sons, Herbert and William, resigned their positions under the government, March 17, 1890, and two days later, Von Caprivi was appointed as Bismarck's successor. Early in July, 1891, Emperor William visited London, received the "freedom of the city," and was given an enthusiastic reception, which was intended to strengthen the bonds of peace and good-will already existing between Germany and England.

Prince Bismarck died on the 30th of

July, 1898. For nearly half a century his name was associated with German statesmanship, and to him, more than to all the other statesmen combined, was due the unity of the German Empire. He was the leading spirit in all the latest events affecting the nation, and was one of the great commanding figures in European diplomacy. A man of giant intellect, wide and varied attainments and indomitable will, he was possessed of all the elements for successful leadership, and the impress of his strong hand remains upon the German Empire.

Difficulties having arisen in 1896, with England and the United States respecting the Samoan Islands in the South Pacific, commissioners were appointed by the three powers to investigate the rights of each, and present a report for the purpose of obtaining a basis for a permanent settlement of the claims of the respective powers. It was understood that a proposition to partition the islands was the one most likely to be adopted.

CHAPTER XII.

Great Events in the History of Russia.

ONSIDERING the repeated attempts on the lives of Russian emperors in the latter part of the nineteenth century, it is worthy of note that its beginning was marked by a royal assassination. Emperor Paul was murdered March 24, 1801, and was succeeded by his eldest son, Alexander I. One of the first acts of the new emperor was to make peace with England and France. He, however, soon changed his policy, and in 1805 joined the third coalition against France, to which Austria and England were parties. Events which belong to general European history, and are well known, need only to be described briefly liere.

On December 2nd of that year took place the battle of Austerlitz, in which the Russians lost more than 20,000 men and many guns and flags. They accused their Austrian allies of treachery. The war was soon ended by the treaty of Pressburg.

Then occurred the fourth coalition against France. In 1807 Napoleon engaged the Russian general Benningsen at Eylau. The battle was protracted and sanguinary, but not decisive. Both parties abandoned the field and retired into winter quarters. Next followed the memorable peace of Tilsit. this treaty the Prussian king, Frederick William III., lost half his domin-Nearly all his Polish possessions were to go to the King of Saxony under the name of the Grand Duchy of War-

Alexander and Napoleon almost aspired to divide the world, or at least Europe, between them. The terms, however, were received by a large party in Rus sia with disgust. The next important event in the reign of Alexander was the conquest of Finland. By a treaty in September, 1809, Sweden surrendered Finland, with the whole of East Bothnia, and a part of West Bothnia, lying eastward of the river Tornea. The Fins were allowed a kind of autonomy which they have preserved to this day.

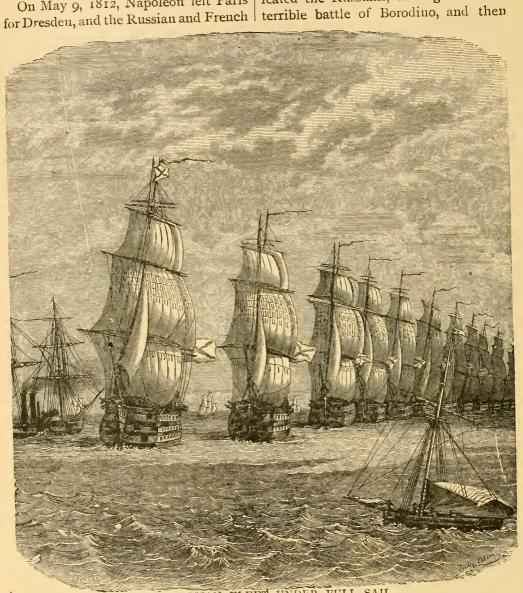
The annexation of Georgia to Russia was consolidated at the beginning of this reign, having been long in preparation. It led to a war with Persia, which resulted in the incorporation of the Province of Shirvan with the Russian empire in 1806.

The Coming Struggle.

In 1809 commenced the fifth coalition against Napoleon. Alexander, who was obliged by treaty to furnish assistance to the French emperor, did all that he could to prevent the war. A quarrel with Turkey led to its invasion by a Russian army. This war was terminated in 1812. Russia gave up Moldavia and Wallachia, which she had occupied, but kept Bessarabia, with the fortress of Khotin and Bender.

Gradually an estrangement took place between Alexander and Napoleon, not only on account of the creation of the Grand Duchy of Warsaw, but because Russia was suffering greatly from the Continental blockade, to which Alex-By a secret treaty, it seemed as if ander had been forced to give his adhesion. of Russia by Napoleon in 1812.

This led to the great invasion the Niemen and advanced by forced marches to Smolensk. Here he de On May 9, 1812, Napoleon left Paris | feated the Russians, and again at the



THE RUSSIAN FLEET UNDER FULL SAIL.

Ambassadors received their passports. The grand army comprised 678,000 men, 356,000 of them being French; and to oppose them, the Russians asembled 372,000 men. Napoleon crossed governor), which raged six days and

entered Moscow, which had been aban doned by most of the inhabitants; soon. afterwards a fire broke out (probably caused by the order of Rostopchin, the city.

Notwithstanding this disaster, Napoleon lingered five weeks among the ruins, endeavoring to negotiate a peace, which he seemed to think Alexander would be sure to grant; but he had mistaken the spirit of the Emperor and his people. On the 18th of October Napoleon reluctantly commenced his backward march. The weather was unusually severe, and the country all round had been devastated by the French on their march. With their ranks continually thinned by cold, hunger, and the skirmishes of the Cossacks who hung upon their rear, the French reached the Beresina, which they crossed near Studianka on the 26th-29th of November with great loss.

The struggle on the banks of this river forms one of the most terrible pictures in history. At Smorgoni, between Vilna and Minsk, Napoleon left the army and hurried to Paris. Finally the wreck of the grand armée under Ney crossed the Niemen. Not more than 80,000 of the whole army are said o have returned.

A Powerful Alliance.

Frederick William III. of Prussia now issued a manifesto, and concluded an alliance with Russia for the reestablishment of the Prussian monarchy. In 1813 took place the battle of Dresden, and the so-called Battle of the Nations at Leipsic on October 16 and the two following days. In 1814 the Russians invaded France with the allies, and lost many men in the assault upon Paris. After the battle of Waterloo, and the conveyance of Napoleon to the island of St. Helena, it fell continue in favor under his son. Be-

which destroyed the greater part of the | to the Russian forces to occupy Cham pagne and Lorraine.

> In the same year Poland was reestablished in a mutilated form, with a constitution which Alexander, who was crowned king, swore to observe. In 1825 the emperor died suddenly at Taganrog at the mouth of the Don. while visiting the southern provinces of his empire. He had added to the Russian dominions Finland, Poland, Bessarabia, and that part of the Caucasus which includes Daghestan, Shirvan, Mingrelia, and Imeretia. Much was done in this reign to improve the condition of the serfs. The Raskolniks were better treated; many efforts were made to improve public education, and the universities of Kazan, Kharkoff, and St. Petersburg were founded.

Charged with Treason.

One of the chief agents of these reforms was the minister Speranski, who for some time enjoyed the favor of the emperor, but he attacked so many interests by his measures that a coalition was formed against him. He was denounced as a traitor, and his enemies succeeded in getting him removed and sent as governor to Nijni-Novgorod. In 1819, when the storm raised against him had somewhat abated, he was appointed to the important post of governor of Siberia. In 1821 he returned to St. Petersburg, but he never regained his former power.

To the mild influence of Speranski succeeded that of Shishkoff, Novosiltzeff, and Arakcheeff. The last of these men made himself universally detested in Russia. He rose to great influence in the time of Paul, and managed to sides many other pernicious measures, it was to him that Russia owed the military colonies which were so unpopular and led to serious riots. The censorship of the press became much stricter, and many professors of liberal tendencies were dismissed from their chairs in the universities.

The country was now filled with secret societies, and the emperer became gloomy and suspicious. In this condition of mind he died, a man thoroughly disenchanted and weary of life. He has been judged harshly by some authors; readers will remember that Napoleon said of him that he was false as a Byzantine Greek. To us he appears as a well-intentioned man, utterly unable to cope with the discordant elements around him. He had discovered that his life was a failure.

A New Conspiracy.

The heir to the throne according to the principles of succession recognized in Russia was Constantine, the second son of the emperor Paul, since Alexander left no children. But he had of his own free will secretly renounced his claim in 1822, having espoused a Roman Catholic, the Polish princess Julia Grudzinska. In consequence of this change in the sovereign's authority, the conspiracy of the Dekabists broke out at the end of the year, their object being to take advantage of the confusion caused by the alteration of the succession to get constitutional government in Russia. Their efforts failed, but the rebellion was not put down without great bloodshed.

Five of the conspirators were executed, and a great many sent to Siberia.

Some of the men implicated were

among the most remarkable of their time in Russia, but the whole country had been long honeycombed with secret societies, and many of the Russian officers had learned liberal ideas while engaged in the campaign against Napoleon. So ignorant, however, were the common people of the most ordinary political terms that when told to shout for Constantine and the constitution they naively asked if the latter was Constantine's wife.

Victorious Over Persia.

The new emperor, Nicholas, the next brother in succession, showed throughout his reign reactionary tendencies; all liberalism was sternly repressed. In 1830 appeared the "Complete Collection of the Laws of the Russian Empire," which Nicholas had caused to be codified. He partly restored the right of primogeniture which had been taken away by the empress Anna as contrary to Russian usages, allowing a father to make his eldest son his sole heir. In spite of the increased severity of the censorship of the press, literature made great progress in his reign. From 1826 to 1828 Nicholas was engaged in a war with Persia, in which the Russians were completely victorious, having beaten the enemy at Elizabetpol, and again under Paskewitch at Javan Bulak. The war was terminated by the peace of Turkmantchai, February 22, 1828, by which Persia ceded to Russia the provinces of Erivan and Nakhitchevan, and paid twenty millions of roubles as an indemnity.

The next foreign enemy was Turkey. Nicholas had sympathized with the Greeks in their struggle for independence, in opposition to the policy of

Alexander; he had also a part to play as protector of the Orthodox Christians, who formed a large number of the sultan's subjects. In consequence of the sanguinary war which the Turks were carrying on against the Greeks and the utter collapse of the latter, England, France, and Russia signed the treaty of London in 1827, by which they forced themselves upon the belligerents as mediators.

Turkish Fleet Destroyed.

From this union resulted the battle of Navarino, October 20, 1827, in which the Turkish fleet was annihilated by that of the allies. Nicholas now pursued the war with Turkey on his own account; in Asia Paskewitch defeated two Turkish armies, and conquered Erzeroum, and in Europe Diebitsch defeated the grand vizier. The Russians crossed the Balkans and advanced to Adrianople, where a treaty was signed in 1829 very disadvantageous to Turkey.

In 1831 broke out the Polish insurrection. Paskewitch took Warsaw in 1831. The cholera which was then raging had already carried off Diebitsch and the Grand Duke Constantine. Poiand was now entirely at the mercy of Nicholas. The constitution which had been granted by Alexander was annulled; there were to be no more diets; and for the ancient palatinates, familiar to the historical student, were substituted the governments of Warsaw, Radom, Lublin, Plock, and Modlin. The university of Vilna, rendered celebrated by Mickiewicz and Lelewel, was suppressed.

By another treaty with Turkey, that of Unkiar-Skelessi, 1833, Russia ac-

quired additional rights to meddle with the internal politics of that country. Soon after the revolution of 1848, the Emperor Nicholas, who became even more reactionary in consequence of the disturbed state of Europe, answered the appeal of the Emperor Francis Joseph, and sent an army under Paskewitch to suppress the Hungarian revolt. After the capitulation of Görgei in 1849, the war was at an end, and the Magyars cruelly expiated their attempts to procure constitutional government.

In 1853 broke out the Crimean War. The emperor was anxious to distribute the possessions of the "sick man," but found enemies instead of allies in England and France. The chief events of this memorable struggle were the battles of the Alma, Balaklava, Inkermann, and Tchernaya, and the siege of Sebastopol; this had been skillfully fortified by Todleben, who appears to have been the only man of genius who came to the front on either side during the war. In 1855 the Russians destroyed the southern side of the city, and retreated to the northern.

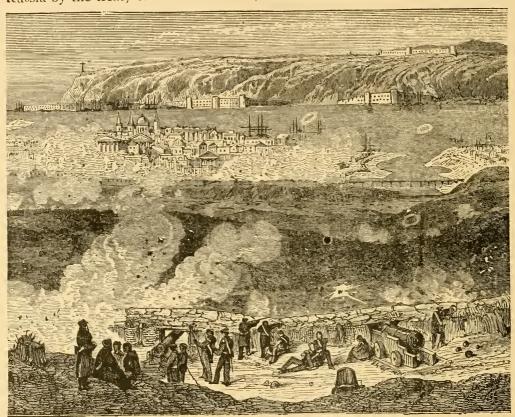
The War Ended.

In the same year, on March 14th, died the emperor Nicholas, after a short illness. Finding all his plans frustrated he had grown weary of life, and rashly exposed himself to the severe temperature of the northern spring. He was succeeded by his son Alexander II., 1855–1881, at the age of thirty-seven. One of the first objects of the new czar was to put an end to the war, and the treaty of Paris was signed in 1856, by which Russia consented to keep no vessels of war in the Black Sea, and to give up her protectorate of the Eastern

Christians; the former, it must be added, she has afterward recovered.

A portion of Russian Bessarabia was also cut off and added to the Danubian principalities, which were shortly to be united under the name of Roumania. This was afterwards given back to Russia by the treaty of Berlin. Sebasout by his son. The landlords, on receiving an indemnity, now released the serfs from their seigniorial rights, and the village commune became the actual property of the serf. This great revolution was not, however, carried out without great difficulty.

The Polish insurrection of 1863 was



THE BOMBARDMENT. SEBASTOPOL DURING

topol also has been rebuilt, so that it is difficult to see what the practical results of the Crimean War were, in spite of the vast bloodshed and expenditure of treasure which attended it.

The next important measure was the emancipation of the serfs in 1861. This

a great misfortune to that part of Poland which had been incorporated with Russia. On the other hand Finland had seen her privileges confirmed.

Among important foreign events of this reign must be mentioned the capture of Schamyl in 1859 by Prince great reform had long been meditated | Bariatinski, and the pacification of the by Nicholas, but he was unable to ac- Caucasus; many of the Circassians, uncomplish it, and left it to be carried able to endure the peaceful life of cultivators of the soil under the new regime, migrated to Turkey, where they have formed one of the most turbulent elements of the population. Turkestan also has been gradually subjugated. In 1865 the city of Tashkend was taken, and in 1867 Alexander II. created the government of Turkestan. In 1858 General Muravieff signed a treaty with the Chinese, by which Russia acquired all the left bank of the river Amur. A new port has been created in Eastern Asia (Vladivostok), which promises to be a great centre of trade.

A Terrible Siege.

In 1877 Russia came to the assistance of the Slavonic Christians against the Turks. After the terrible siege of Plevna, nothing stood between them and the gates of Constantinople. In 1878 the treaty of San Stefano was signed, by which Roumania became independent, Servia was enlarged, and a free Bulgaria, but under Turkish suzerainty, was created. But these arrangements were subsequently modified by the treaty of Berlin. Russia got back the portion of Bessarabia which she had lost, and advanced her Caucasian frontier.

The new province of Bulgaria was cut into two, the southern portion being entitled Eastern Roumelia, with a Christian governor, to be appointed by the Porte, and self-government. Austria acquired a protectorate over Bosnia and Herzegovina. The latter part of the reign of Alexander II. was a period of great internal commotion, on account of the spread of Nihilism, and the attempts upon the emperor's life, which unfortunately were at last successful.

In the cities in which his despotic father had walked about fearless, without a single attendant, the mild and amiable Alexander was in daily peril of his life.

On April 16, 1866, Karakozoff shot at the emperor in St. Petersburg; in the following year another attempt was made by a Pole, Berezowski, while Alexander was at Paris on a visit to Napoleon III.; on April 14, 1879, Solovioff shot at him. The same year saw the attempt to blow up the Winter Palace and to wreck the train by which the czar was traveling from Moscow to St. Petersburg. A similar conspiracy in 1881, March 13, was successful. Five of the conspirators, including a woman, Sophia Perovskaia, were publicly executed.

Plots and Murders

Thus terminated the reign of Alexder II., which had lasted nearly twentysix years. He died leaving Russia exhausted by foreign wars and honeycombed by plots. His wife and eldest son Nicholas had died before him, th latter at Nice. He was succeeded by his second son Alexander, born in 1845, whose reign has been characterized by conspiracies and constant deportations of suspected persons. It was long before he ventured to be crowned in his ancient capital of Moscow, in 1883, and the chief event since then has been the disturbed relations with England, which for a time threatened war.

An incident of peaceful significance was the visit of the emperor of Germany to the czar at Peterhof, July 19-23, 1888. On the 27th of the same month the ninth centenary of the introduction of Christianity was cele

brated at Kieff. The government being embarrassed on account of the low state of its treasury, signed an agreement for a loan of \$100,000,000 in November of this year; the loan was immediately taken, chiefly by French capitalists. Shortly afterward a loan of 700,000,000 francs was concluded with the Rothschilds and other bankers.

The autumn of 1891 was a period of great distress throughout a considerable part of Russia on account of the failure of the harvests. In some localities the entire population were reduced to the verge of starvation, and many persons actually perished from hunger. Measures of relief were organized by the government, and large importations of grain from the United States mitigated in some degree the severity of the calamity.

Very unfavorable comment by other nations was made upon the action of the Russian government, resulting in oppressive measures against the Jews. The effect of this proscription was severely felt, and was the cause of great hardship and suffering. Those of the Jewish population who were able to emigrate sought refuge elsewhere.

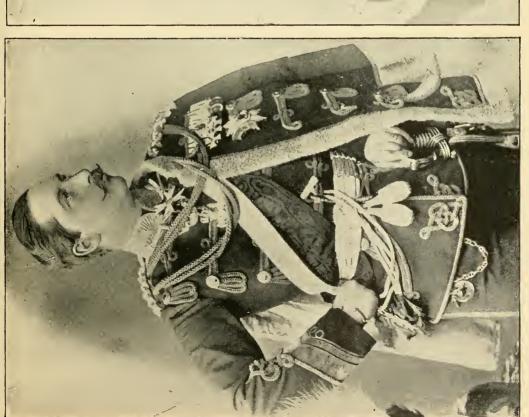
The year 1899 was characterized by of war. So much an important conference in Holland of commissioners appointed by the great in the near future.

powers of Europe and by the United States, for the purpose of acting upon a proposition by the Czar of Russia for disarming the nations and ending war. Great interest attended the Emperor's efforts to secure perpetual peace, and it was generally conceded that an important step had been taken in that direction.

The deliberations of the conference were long and earnest, and one of the results was the formulation of articles of arbitration which pointed out the methods of procedure between the nations in the settlement of disputes. It was considered a sarcastic commentary upon this well-meant attempt to abolish war that the struggle between the English and the South African Republics should have followed so quickly. It was evident that the time was not yet rip for fully inaugurating the principle of arbitration.

A moral result, however, was gained by the great nations assembling in convention to discuss the question of disarmament and to promote a general peace. This is the highest point gained in the efforts of the world's philanthropists, statesmen and rulers, to disband their armies and silence the thunder-roar of war. So much at least was gained, and perhaps more, that will be manifest in the near future.





THE EMPRESS OF GERMANY
SHE WAS PRINCESS AUGUSTE-VICTORIA OF SLESWICK-HOLSTEIN
AND IS MUCH ADMIRED AND BELOVED

SON OF FREDERICK III AND GRANDSON OF QUEEN VICTORIA CAME TO THE THRONE IN 1888

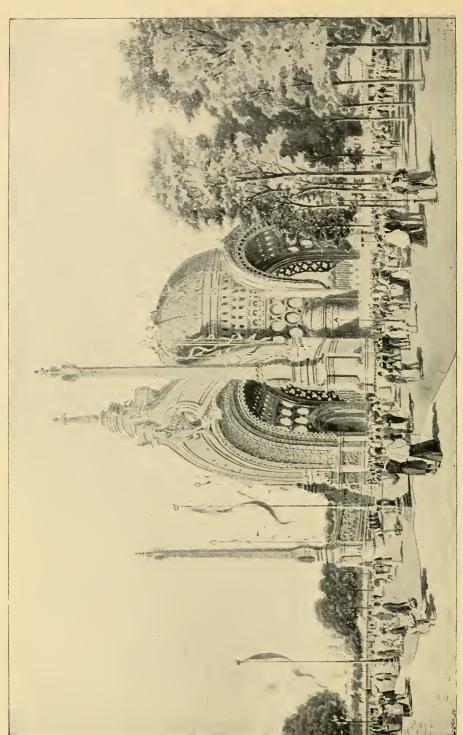


SON OF CHRISTIAN IX, KING OF DENMARK, AND BROTHER OF THE PRINCESS OF WALES

SHE WAS PRINCESS OLGA OF THE IMPERIAL FAMILY OF RUSSIA, HER HUSBANL BEING KING GEONGE, SON OF THE KING OF DENMARK, AND RROTHER OF THE FRINGESS AF WAILES



QUEEN VICTORIA LISTENING TO A DISPATCH FROM THE SEAT
OF WAR IN SOUTH AFRICA



MAIN ENTRANCE TO THE GREAT PARIS EXPOSITION OF 1900

CHAPTER XIII.

Nations of Northern Europe-Denmark, Sweden and Norway.

N account of the mental derangement of his father, Prince Frederick VI. was declared regent of Denmark in 1784, and at the beginning of the century was the acting ruler, the sovereign in every thing except the name. He soon proved his capacity to govern by passing several judicious enactments.

The peasants living on the crown lands were gradually emancipated—an example followed by a number of the nobility on their respective estates. In the abolition of the African slave trade Denmark had the honor of taking the lead among the governments of Europe.

The crown prince, guided by the counsels of Count Bernstorff, long remained neutral in the political convulsion engendered by the French Revolution. He continued to adhere steadfastly to this plan until in 1801 the Emperor Paul of Russia having, as in the case of the Armed Neutrality, formed a compact of the northern powers hostile to Eugland, a British fleet was sent into the Baltic under the orders of Sir Hyde Parker, with Lord Nelson as his second in command.

It was this fleet which taught the Danes that their capital was not impregnable, and that the long line of men-of-war moored in front of the harbor was an insufficient defence against such enterprising opponents. The attack took place on the 2d of April, 1801; and the resistance of the Danes was spirited, but fruitless. The loss of the English in killed and wounded exceeded 1000 men, but that of their opponents

was much greater, and most of their shipping was destroyed. Happily little injury was done to the capital. A cessation of hostilities took place forthwith, and was followed by a treaty of peace. The death of Paul, which occurred soon afterwards, dissolved the compact between the northern courts.

But no treaty of peace could be regarded as permanent during the ascendancy of Napoleon. After defeating first Austria and then Prussia, that extraordinary man found means to obtain the confidence of the Emperor Alexan der of Russia, and in the autumn of 1807 threatened to make Denmark take part in the war against England. though the Danish Government discovered no intention to violate its neutrality, the English Ministers, eager to please the public by acting on a system of vigor, despatched to the Bairie both a fleet and an army, in order to compel the surrender of the Danish navy, upon condition of its being reored in the event of peace.

The Fleet Surrenders.

To such a demand the crown prince gave an immediate negative, declaring that he was both able and willing to maintain his neutrality, and that his fleet could not be given up on any such condition. On this the English army landed near Copenhagen, laid siege to that city, and soon obliged the government to purchase its safet / by surrendering the whole of its nay al force.

This act, the most questionable in point of justice of any committed by

the British Government during the war, can hardly be defended on the score of policy. The resentment felt on the occasion by the Emperor of Russia was so great as to deprive England during four arduous years of the benefit of his alliance; and the seizure of the Danish fleet so exasperated the crown prince and the nation at large, that they forthwith declared war against England, throwing themselves completely into the arms of France.

The hostilities between England and Denmark were carried on by sea, partly at the entrance of the Baltic, and partly on the coast of Norway. These consisted of a series of actions between single vessels or small detachments, in which the Danes fought always with spirit, and not infrequently with success. In regard to trade, both nations suffered severely—the British merchantnen in the Baltic being much annoyed by Danish cruisers, whilst the foreign trade of Denmark was in a manner suspended, through the naval superiority of England.

Norway Ceded to Sweden.

The situation of the two countries continued on the same footing during Sve years, when at last the overthrow of Bonaparte in Russia opened a hope of deliverance to those who were involuntarily his allies. The Danish Government would now gladly have made peace with England; but the latter, in order to secure the cordial cooperation of Russia and Sweden, had gone so far as to guarantee to these powers the cession of Norway on the part of Denmark.

The Danes, ill prepared for so great

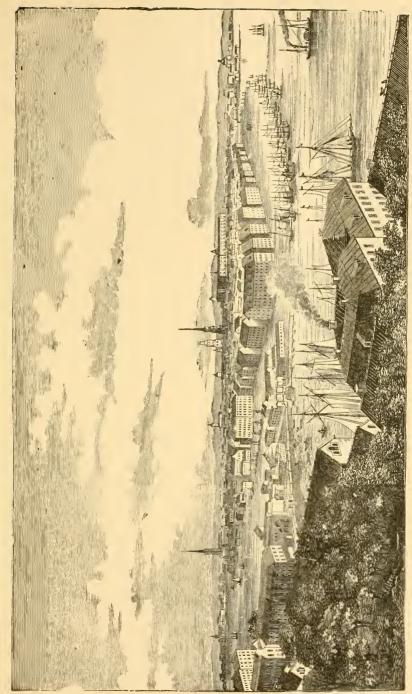
with France during the eventful year 1813; but at the close of that campaign a superior force was directed by the allied sovereigns against Holstein, and the result was, first an armistice, and eventually a treaty of peace in January, 1814. The terms of the peace were, that Denmark should cede Norway to Sweden, and that Sweden, in return should give up Pomerania to Denmark.

But Pomerania, being too distant to form a suitable appendage to the Danish territory, was exchanged for a sum of money and a small district in Lauenburg adjoining Holstein. On the part of England, the conquests made from Denmark in the East and West Indies were restored—all, in short, that had been occupied by British troops, excepting Heligoland.

The Monarchy in Danger.

After the Congress of Vienna, by which the extent of the Danish monarchy was considerably reduced, the court of Copenhagen was from time to time disquieted by a spirit of discontent manifesting itself in the duchies, and especially in that of Holstein, the outbreak of which in 1848 threatened the monarchy with complete dissolution. A short recapitulation of the relation of the different parts of the kingdom to each other will furnish a key to the better comprehension of these internal troubles.

When Christian I. of the house of Oldenburg ascended the throne of Denmark in 1448, he was at the same time elected Duke of Schleswig and Holstein, while his younger brother received Oldenburg and Delmenhorst. In 1544 the older branch was again a sacrifice, continued their connection divided into two lines, that of the royal



HE CITY OF STOCKHOLM.

house of Denmark, and that of the dukes of Holstein-Gottorp. Several collateral branches arose afterwards, of which those that survived were—the Augustenburg and Glucksburg branches belong to the royal line, and the ducal Holstein-Gottorp branch, the head of which was Peter III. of Russia.

The Danish Possessions.

In 1762 Peter threatened Denmark with a war, the avowed object of which was the recovery of Schleswig, which had been expressly guaranteed to the Danish Crown by England and France at the Peace of Stockholm, 1720. sudden dethronement, however, prevented him from putting this design into execution. The Empress Catharine agreed to an accommodation. which was signed at Copenhagen in 1764, and subsequently confirmed by the Emperor Paul, 1773, by which the ducal part of Schleswig was ceded to the Crown of Denmark. The czar abandoned also his part of Holstein in exchange for Oldenburg and Delmonhorst, which he transferred to the younger branch of the Gottorp family. According to the scheme of Germanic organization adopted by the Congress of Vienna, the king of Denmark was declared member of the Germanic body on account of Holstein and Lauenburg. invested with three votes in the General Assembly, and had a place, the tenth in rank, in the ordinary diet.

After the restoration of peace in 1815, the States of the Duchy of Holstein, never so cordially blended with Denmark as those of Schleswig, began to show their discontent at the continued non-convocation of their own Frederick VI. The preparation of a new constitution for the whole kingdom was the main pretext by which the court evaded the claims of the petitioners, who met, however, with no better success from the German diet before which they brought their complaints in 1822.

After the stirring year of 1830, the movement in the duchies, soon to degenerate into a mutual animosity between the Danish and German population, became more general. The scheme of the court to meet their demands by the establishment of separate deliberative assemblies for each of the provinces failed to satisfy the Holsteiners, who continually urged the revival of their long-neglected local laws and privileges. Nor were matters changed at the accession in 1838 of Christian VIII., a prince noted for his popular sympathies and liberal principles.

Wide-Spread Rebellion.

The feeling of national animosity was greatly increased by the issue of certain orders for Schleswig, which tended to encourage the culture of the Danish language to the prejudice of the German. The elements of a revolution being thus in readiness waited only for some impulse to break forth into action. Christian died in the very beginning of 1848, before the outbreak of the French Revolution in February, and left his throne to his son Frederick VII., who had scarcely received the royal unction when half of his subjects rose in rebellion against him.

In March, 1848, Prince Frederick of Augustenburg, having gained over the garrison of Rendsburg, put himself at assemblies despite the assurances of the head of a provincial government

proclaimed at Kiel. A Danish army, marching into Schleswig, easily reduced the duchy as far as the banks of the Eider; but, in the meantime, the new national assembly of Germany resolved upon the incorporation of Schleswig; and the king of Prussia followed up their resolution by sending an army into the duchies under the command of General Wrangel.

The Prussian general, after driving the Danes from Schleswig, marched into Jutland; but on the 26th of August an armistice was signed at Malmoe, and an agreement come to by which the government of the duchies was entrusted to a commission of five members—two nominated by Prussia, two by Denmark, and the fifth by the common consent of the four, Denmark being also promised an indemnification for the requisitions made in Intland.

War Goes On.

After the expiration of the armistice, the war was renewed with the aid of Prussian troops and other troops of the confederacy, from March to July, 1849, when Prussia signed a second armistice for six months. The duchies now continued to increase their own troops, being determined to carry on the war at their own charge without the aid of Prussia, whose policy they stigmatized as inconsistent and treacherous. chief command of the Schleswig-Holstein army was intrusted to General Willisen, a scientific and able soldier; but henceforth the Danes had little to fear, especially as the cry of German unity brought but an insignificant number of volunteers to the camp of the Holsteiners.

Generals Krogh and Schlepegrell, was at the battle of Idsted, July 23rd. Near this small village, protected by lakes and bogs, Willisen lay encamped with his centre, his right wing at Wedelspung, extending along the Lake Langsö, his left spreading along the Arnholtz lake. The Danes approaching on the high road from Flensburg to Schleswig, attacked the enemy on all sides; and, after having been repeatedly repulsed, they succeeded in driving the Schleswig-Holsteiners from all their positions. The forces engaged on each side were about 30,000; the number of killed and wounded on both sides was upwards of 7,000.

Peace with Prussia.

After the victory of Idsted, the Danes could hardly expect to meet with any serious resistance, and the confidence of the court of Copenhagen was further increased by the peace which was concluded with Prussia, July, 1850, by which the latter abandoned the duchies to their own fate, and soon afterwards aided in their subjection. The sole question of importance which now awaited its solution was the order of succession, which the European powers thought to be of such importance as to delay its final settlement till 1852.

The extinction of the male line in King Frederick was an event foreseen by the king, the people and the foreign powers. After protracted negotiations between the different courts, the representatives of England, France, Austria, Russia, Prussia and Sweden, a treaty relative to the succession was signed in London, May 8, 1852. According to this protocol, in case of default of male The last victory of the Danes, under issue in the direct line of Frederick VI.,

the crown was to pass to Prince Christian of Glucksburg, and his wife, the Princess Louisa, of Hesse, who, through her mother, Princess Charlotte of Denmark, was the niece of King Christian VIII.

The treaty of London did not fulfill the expectations of the signitaries as to a settlement of the agitation in the duchies. The duke of Augustenburg had accepted the pardon held out to him on condition that his family resigned all claim to the sovereignty of the duchies, but he continued to stir up foreign nations about his rights, and when he died his son Frederick maintained the family pretensions. At last, in the autumn of 1863, Frederick VII. died very suddenly at the castle of Glucksburg, in Schleswig, the seat of his appointed successor. As soon as the ministry in Copenhagen received news of his death, Prince Christian of Glucksburg was proclaimed king as Christian IX., and the young duke of Augustenburg appeared in Schleswig, assuming the title of Frederick VIII.

Demands Upon Denmark.

The claims of the pretender were supported by Prussia, Austria and other German states, and before the year was out Generals Gablenz and Wrangel occupied the duchies in command of Austrian and Prussian troops. The attitude of Germany was in the highest degree peremptory, and Denmark was called upon to give up Schleswig-Holstein to military occupation by Prussia and Austria until the claims of the duke of Augustenburg were settled.

In its dilemma the Danish Government applied to England and to France, and receiving from these powers what

it rightly or wrongly considered as encouragement, it declared war with Germany in the early part of 1864. The Danes sent their general, De Meza, with 40,000 men to defend the Dannewerk, the ancient line of defences stretcling right across the peninsula from the North Sea to the Baltic. The movements of General De Meza were not however, successful; the Dannewerk, popularly supposed to be impregnable. was first outflanked and then stormed. and the Danish army fell back on the heights of Dybbol, near Flensborg, which was strongly fortified, and took up a position behind it, across the Little Belt, in the island of Alsen.

Heroic Courage.

This defeat caused almost a panic in the country, and, finding that England and France had no intention of aiding them, the Danes f.!t the danger of annihilation close upon them. The courage of the little nation, however, was heroic, and they made a splendid stand against their countless opponents. General Gerlach was sent to replace the unlucky De Meza; the heights of Dybbol were harder to take than the Germans had supposed, but they fell at last, and with them the strong position of Sonderburg, in the island of Alsen.

The Germans pushed northwards until they overran every part of the mainland, as far as the extreme north of Jutland. It seemed as though Denmark must cease to exist among the nations of Europe; but the Danes at last gave way, and were content to accept the terms of the Peace of Vienna, in October, 1864, by which Christian IX. renounced all claim to Lauenburg, Holstein and Schleswig, and agreed to have

no voice in the final disposal of those provinces.

For the next two years Europe waited to see Prussia restore North Schleswig and Alsen, in which Danish is the popular language, and which Austria had demanded should be restored to Denmark in case the inhabitants should express that as their wish by a plebiscite. When the war broke out between Austria and Prussia in 1866, and resulted in the humiliation of Austria, the chances of restoration passed away, and the duchies have remained an integral part of Prussia. Notwithstanding her dismemberment, Denmark has prospered to an astonishing degree, and her material fortunes have been constantly in the ascendant.

Denmark has been very fortunate in forming marriage alliances with the most powerful royal houses of Europe.

On the 10th of March, 1863, Princess Alexandra, of Denmark, was married to the Prince of Wales at Windsor. Her sister, the Princess Dagmar, was married to Prince Alexander, of Russia, on November 9, 1866.

In the great Franco-Prussian War of 1870 Denmark remained neutral, and it may be said that of late years she has sought to maintain a peace porcey with other nations. She has, however, been distracted by internal dissensions, but not to such an extent as to threaten her constitution or her unity.

King Christian's seventieth birthday occurred on April 8, 1888, and the 15th of November of the same year was the twenty fifth anniversary of his accession to the throne. Both events were celebrated with great enthusiasm throughout the country, and with renewed pledges of loyalty to the throne.

SWEDEN IN THE NINETEENTH CENTURY.

USTAVUS IV. was not quite! fourteen years old when his father was murdered, and during his minority the government was carried on by his uncle, the duke of Södermanland. Gustavus began to exercise royal authority in 1796. His reign was remarkable chiefly for the obstinacy with which he clung to his own ideas, no matter how far they might conflict with the obvious interests of his country. He had a bitter detestation of Bonaparte, and in 1803 went to Carlsruhe in the hope that he might induce the emperor and some of the German princes to act with him in support of the Bourbons.

His enmity led to an open rupture with France, and even after the peace

of Tilsit, when Russia and Prussia offered to mediate between him and the French emperor, he refused to come to terms. The consequence was that he lost Stralsund and the island of Rügen. He displayed so much friendship for England that Russia and Denmark, acting under the influence of France, declared war against him; and the whole of Finland was soon held by Russian troops.

Gustavus attacked Norway, but his army was driven back by the Danes and Norwegians. He still declined to make peace, and he even alienated England when she attempted to influence him by moderate counsels. The Swedish people were so enraged by the consequences of his policy that in 1809 he was de-

throned, and the claims of his descendants to the crown were also repudiated. He was succeeded by the duke of Södermanland, who reigned as Charles XIII.

Charles XIII., 1809-1818, concluded peace with Russia, Denmark and France, ceding to Russia by the treaty of Frederikshamm, 1809, the whole of Finland. The loss of this territory, which had been so long associated with the Swedish monarchy, was bitterly deplored by the Swedes, but it was universally admitted that under the circumstances the sacrifice was unavoidable. Charles assented to important changes in the constitution, which were intended to bring to an end the struggle between the crown and the aristocracy and to provide some security for the maintenance of popular rights. The king was still to be at the head of the executive, but it was arranged that legislative functions and control over taxation should belong to the diet, which was to consist of four orders—nobles, clergymen, burghers, and peasants.

Sweden Surprises Europe.

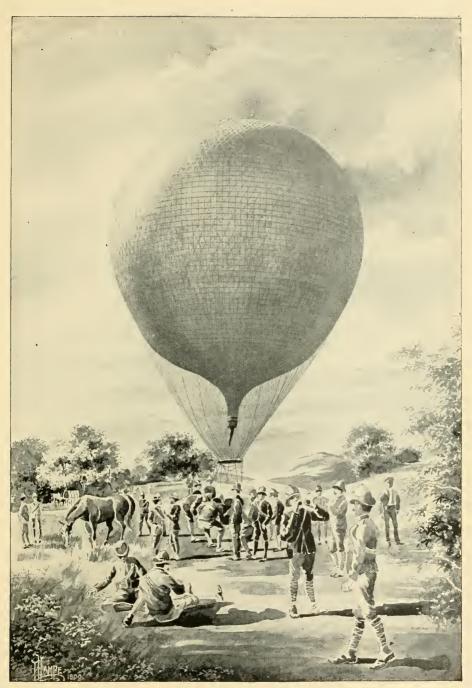
As Charles XIII, was childless, the diet elected as his successor Prince Christian Augustus of Holstein-Sonderburg-Augustenburg. In 1810, soon after his arrival in Stockholm, this prince suddenly died; and Sweden astonished Europe by asking Marshal Bernadotte to become heir to the throne. Bernadotte, who took the name of Charles John, was a , man of great vigor and resource, and soon made himself the real ruler of Sweden. Napoleon treated Sweden as almost a conquered country, and compelled her to declare war with England. Bernadotte, associating himself heartily with his adopted land, resolved to secure its independence, and entered into an alliance with Russia.

In 1813 he started with an army of 20,000 Swedes to co-operate with the powers which were striving finally to crush the French emperor. The proceedings of the Swedish crown prince were watched with some suspicion by the allies, as he was evidently unwilling to strike a decisive blow at France; but after the battle of Leipsic he displayed much activity. He blockaded Hamburg, and by the peace of Kiel, concluded in January, 1814, he forced Denmark to give up Norway. He then entered France, but soon returned and devoted his energies to the conquest of Norway, which was very unwilling to be united with Sweden. Between the months of July and November, 1814, the country was completely subdued, and Charles XIII. was proclaimed king.

The Countries United.

The union of Sweden and Norway, which has ever since been maintained, was recognized by the Congress of Vienna; and it was placed on a sound basis by the frank adoption of the principle that, while the two countries should be subject to the same crown and act together in matters of common interest each should have complete control ove. its internal affairs. The new relation of their country to Norway gave much satisfaction to the Swedes, whom it consoled in some measure for the loss of Finland. It also made it easy for them to transfer to Prussia in 1815 what remained of their Pomeranian territories.

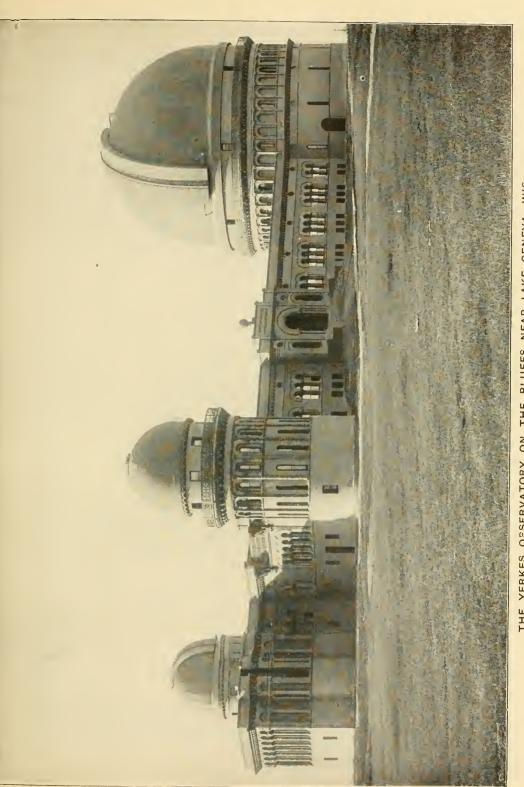
In 1818 Bernadotte ascended the throne as Charles XIV., and he reigned until he died in 1844. Great material improvements were effected during his



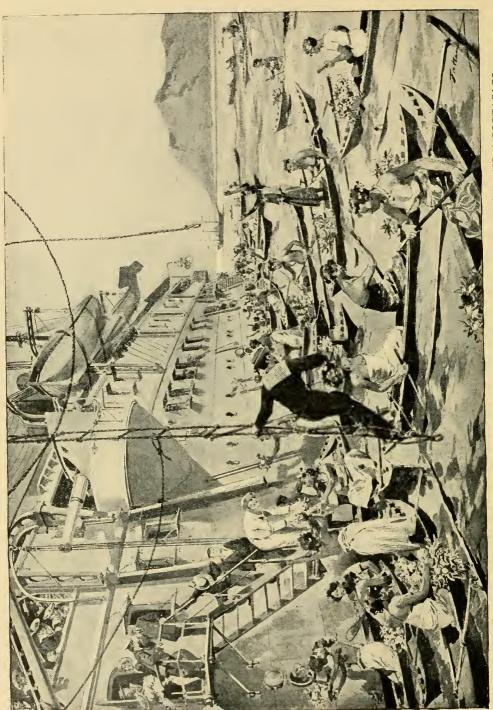
THE BALLOON USED IN MODERN WARFARE



ON THE RIGHT CENTRE IS BUGLER SHERLOCK, AGED FOURTEEN, WHO SHOT THREE BOERS WITH HIS REVOLVER CHARGE OF THE 5TH LANCERS AT THE BATTLE OF ELANDSLAAGTE



IT IS CONNECTED WITH THE ASTRONOMICAL DEPARTMENT OF THE CHICAGO UNIVERSITY, AND CONTAINS ONE OF THE GREATEST JELESCOPES IN THE WORLD, DONNECTED WITHION DOLLARS THE YERKES OBSERVATORY ON THE BLUFFS NEAR LAKE GENEVA, WIS.



BATTLESHIPS IN SAMOAN WATERS-NATIVE MERCHANTS TRADING FRUIT AND VEGETABLES

reign. He caused new roads and canals to be constructed; he encouraged the cultivation of districts which had formerly been barren; and he founded good industrial and naval schools. He was not, however, much liked by his subjects. He never mastered the Swedish language, and he was so jealous of any interference with his authority that he ternly punished the expression of opintons which he disliked.

To the majority of educated Swedes the constitution seemed to be ill-adapted to the wants of the nation, and there was a general demand for a political system which should make the Government more directly responsible to the people. In 1840 a scheme of reform was submitted to the diet by a committee which had been appointed for the purpose, but the negotiations and discussions to which it gave rise led to no definite result.

King Oscar.

Charles XIV. was succeeded by his son Oscar I., 1844-1859. Oscar had always expressed sympathy with liberal opinions, and it was anticipated that the constitutional question would be settled during his reign without much diffi-11ty. These expectations were disappointed. The diet met soon after his accession, and was asked to accept the scheme which had been drawn up in 1840. The measure received the cordial approval of the burghers and peasants, but was rejected by the nobles and the clergy. In 1846 a committee was appointed to prepare a new set of proposals, and late in the following year the discussion of its plans began.

While the debates on the subject were of whom they had for a long time ceased proceeding some excitement was pro- to be in the slightest degree jealous.

duced by the revolutionary movement of 1848, and a new ministry, pledged to the cause of reform, came into office. The scheme devised by this ministry was accepted by the committee to which it was referred, but the provisions of the existing constitution rendered it necessary that the final settlement should depend upon the vote of the next diet. When the diet met in 1850 it was found that the difficulties in the way were for the time insuperable. The proposals of the Government were approved by a majority of the burghers, but they were opposed by the nobles, the clergy and the peasantry. The solution of the problem had, therefore, to be indefinitely postponed.

Valuable Reforms.

Although the constitution was not reformed, much was done in other ways during the reign of Oscar I. to promote the national welfare. The criminal law was brought into accordance with modern ideas, and the law of inheritance was made the same for both sexes and for all classes of the community. Increased freedom was secured for industry and trade; the methods of administration were improved; and the state took great pains to provide the country with an efficient railway system. The result of the wise legislation of this period was that a new spirit of enterprise was displayed by the commercial classes, and that in material prosperity the people made sure and rapid progress.

In 1848, when the difficulty about Schleswig-Holstein led to war between Denmark and Germany, the Swedes sympathized cordially with the Danes, of whom they had for a long time ceased to be in the slightest degree jealous. Swedish tre sps were landed in Fünen, and through the influence of the Swedish government an armistice was concluded at Malmö. The excitement in favor of Denmark soon died out, and when the war was resumed in 1849 Sweden resolutely declined to take part in it. The outbreak of the Crimean War greatly alarmed the Swedes, who feared that they might in some way be dragged into the conflict.

In 1855, having some reason to complain of Russian acts of aggression on his northern frontiers, the king of Sweden and Norway concluded a treaty with England and France, pledging himself not to cede territory to Russia, and receiving from the Western powers a promise of help in the event of his being attacked. The demands based on this treaty were readily granted by Russia in the peace of Paris in 1856.

A Popular Sovereign.

Tharles XV., 1859–1872, came to the throne after his father's death. Nearly two years before his accession he had been made regent in consequence of Oscar I.'s ill-health. Charles was a man of considerable intellectual ability and of decidedly popular sympathies and during his reign the Swedish people became enthusiastically loyal to his dynasty. In 1860 two estates of the realm—the peasants and the burghers—presented petitions, begging him to submit to the diet a scheme for the reform of the constitution.

The main provisions of the plan offered in his name were that the diet should consist of two chambers,—the first chamber to be elected for a term of nine years by the provincial assemblies and by the municipal corporations of strongly in support of the vially in foreign affairs. The have always been a source Norway, and an international was opened at Bergen in which was largely attended.

towns not represented in these assemblies, the second chamber to be elected for a term of three years by all natives of Sweden possessing a specified property qualification. The executive power was to belong to the king, who was to act under the advice of a council of state responsible to the national representatives. This plan, which was received with general satisfaction, was finally adopted by the diet in 1866, and is still in force.

Norway Free and Independent.

Early in the reign of Charles XV. there were serious disputes between Sweden and Norway, and the union of the two countries could scarcely have been maintained but for the tact and good sense of the king.

Charles XV. died in 1872, and was succeeded by his brother Oscar II. Under him Sweden has maintained good relations with all foreign powers, and political disputes in the diet have never been serious enough to interrupt the material progress of the nation.

The history of Norway since 1814 has been practically that of Sweden. In that year Charles XIII. of Sweden was proclaimed king by the national diet assembled at Christiania, and accepted the constitution which declared Norway to be a free, independent, indivisible and inalienable state, united to Sweden. In 1893 the eightieth anniversary of the union of Norway and Sweden was celebrated; King Oscar, at a banquet spoke strongly in support of the union, specially in foreign affairs. The fisheries have always been a source of profit to Norway, and an international exhibition was opened at Bergen in May, 1898,

CHAPTER XIV.

Nations of Southern Europe-Italy, Greece, Turkey and Spain.

N the 1st of January, 1806, Austria lost her Italian possessions by the treaty of Pressburg. The kingdom ceased on the overthrow of Napoleon, 1814, and the Lombardo-Venetian kingdom was established for Austria April 7, 1815. The legions of Austria were at the service of all the petty despots in the other parts of Italy, while a yet larger army of spies was at work in every corner of the unhappy country.

The general misery provoked conspiracy, and revolutionary societies sprang up everywhere. But the movement had as yet no directing head. There were risings in Southern Italy in 1820, but they were suppressed the following year and the leaders executed, and numerous less important insurrections there, in the period preceding 1846, were easily put down.

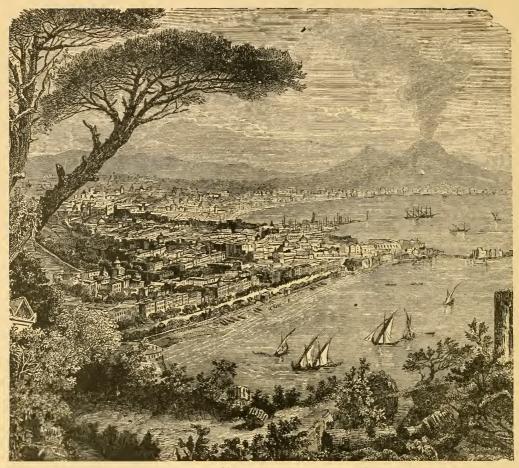
Other abortive attempts were made in Piedmont, in Lombardy, in Modena and the Romagna, the only result of which was to make the ruler's hand yet heavier on the people. Nor was there thorough unanimity or common action among Italian liberals. The extreme Republicans, represented by the party of Young Italy, were headed by Mazzini, whose fiery eloquence and enthusiasm transformed the vague desires of his countrymen into a passionate hope; but his policy sanctioned methods from which more sober patriots shrank. From Geneva he led a band of refugees to the invasion of Savoy, in 1833, because the new king, Charles Albert, would not enter on a war with Austria; but this wild raid proved an utter failure.

Already the wise minds in Italy looked to Sardinia for deliverance; but the dream of a confederacy, with perhaps the Pope as president, was not yet dispelled. Nay, it seemed about to be realized when, in 1846, Pius IX. assumed the tiara, and initiated a series of liberal reforms. Constitutions were granted in 1847 by all the rulers save Austria and Ferdinand II. of Naples; and from the latter a constitution was wrung in the following year.

Massacre in Milan.

The year of revolutions, 1848, opened with a street massacre by the Austrians in Milan, on January 2nd. In February the French Republic was declared, and then in Italy the party of Mazzini was for a moment supreme. Sicily revolted from Ferdinand, and in March Charles Albert declared war on the Austrians, who had been driven out of Milan and Venice. He passed the Ticino, and defeated Radetsky at Goito; but on July 25th the Austrians won the decisive battle of Custozza, re-entered Milan, and placed the country under martial law.

In Naples there had been a massacre in May, and on August 30th Messina was bombarded. Meanwhile the Pope's heart had failed him. His troops had gone to the help of the Sardinians, but before their surrender he had declared their advance to have been without his leave. The Republicans, who had regarded his liberal measures with suspi-



VIEW OF NAPLES WITH MOUNT VESUVIUS IN THE DISTANCE.

cion and jealousy, now denounced him as a traitor to the cause of Italian freedom. On November 15th his wisest minister, Count Rossi, was assassinated, and Pius fled to Gaeta in disguise.

In the hope of obtaining some advantage in the struggle, the Pope had endeavored to establish diplomatic relations with Great Britain. These were accepted and authorized by Parliament, and undoubtedly had some moral effect in strengthening the position of the Vatican. The revolution, however, went forward with unabated vigor, and there was a political upheaval that astonished

the thrones of Europe. All the conservative elements that stand for stability, law and order were called to action.

A republic was set up in Rome on February 9, 1849, under Mazzini and two other triumvirs. The Grand Duke Leopold had fled from Florence, but Tuscany refused to join herself to the republic; yet when the sovereign she had invited back returned, his first act, supported by the presence of Austrian troops, was to suppress the constitution. In Piedmont the ultra-radicals, headed by Rattazzi, were now in power, and a

fresh campaign against Austria was begun—this time lasting less than four days. On March 23, Radetsky defeated the Piedmontese at Novara. Charles Albert gave up his throne to his son, Victor Emanuel II., and died, brokenhearted, at Oporto four months later.

Efforts were now made to reduce Rome and Venice. In vain did Garibaldi, who had been called to the defense of Rome, defeat the Neapolitans at Palestrina and Velletri. A French army, under General Oudinot, took the city, after a four weeks' siege, on July 2nd. Venice, under the heroic Daniel Manin, bravely kept her enemies at bay until August 22nd. The petty sovereigns now came back—the Pope last, in April, 1850. Rome, occupied by a French garrison, was kept in a state of siege for seven years, and the city never quite recovered its freedom until 1870.

Revolution a Failure.

Italy's first general effort for freedom had ended in failure: 1848 was a year of unfulfilled visions. But one important gain was affected: the dream of federation was ended, and all men looked now to the House of Savoy, save the few idealists, like Mazzini, who afterwards stood sternly apart from the triumphs of compromise.

Victor Emmanuel was faithful to the Italian cause, and persevered in the path of reform on which his family had entered. Sardinia was relieved, by the law which gave the government power to abolish monasteries, from the incubus of an army of idle and ignorant ecclesiastics; a liberal constitution was in torce, the press was free, education was spreading, and a measure of religious liberty was enjoyed. In 1853 the Sar-

dinian prime ministry passed into the hands of Cavour, the brain, as Garibaldi was the arm, of the coming struggle. Henceforth he inspired and guided the national movement, until his death in the moment of victory.

Another War.

The Sardinian troops, reorganized by La Marmora, were sent under that general to the Crimea, where they won for themselves honor, and for their country allies amongst the great powers. Cayour made terms with Louis Napoleon, and in 1859 war was declared once more against Austria. The French and Italians won the battles of Magenta and Solferino in June, and then the French emperor, acting independently, agreed to a treaty which left the Austrians in possession of Venetia, from the Mincio eastward. The indignation of the Piedmontese, whose sovereign had, under Cavour's agreement with Louis Napoleon, to give up Savoy and Nice in return for this assistance, was intense; but the states of Central Italy voted their union to the kingdom of Victor Emmanuel, and were annexed in March, 1860; and a few days after Southern Italy revolted from Francis II., the son of Ferdinand, the detested Bomba.

Garibaldi and his volunteers, their expedition secretly favored by Cavour, went to the support of the insurrection in May, and in September entered Naples. Cavour, with the consent of Louis Napoleon (who, however, maintained the Pope in Rome, because his own position in France was strengthened by his championing the head of the Catholic church), now sent an army into the papal states, which defeated the Pope's troops at Castelfidardo, joined Garibaldi,

and helped him to defeat the Neapolitan generals on the Volturno.

In October Victor Emmanuel entered the Abruzzi, and Garibaldi resigned his dictatorship and retired to his islandfarm. In February, 1861, the first Italian parliament met at Turin, and Victor Emmanuel was proclaimed king of Italy. But Rome and Venice were not yet freed, and Cavour died in June of this year. In 1862 Garibaldi raised a body of volunteers to liberate Rome, and, having crossed to the mainland, was defeated at Aspromonte; the blame, however, fell chiefly on Rattazzi, who was then minister, and who had sought to follow Cavour's policy, and to reap the advantage of Garibaldi's expedition, but had neglected to first come to an understanding with France.

Garibaldi at the Front.

The expressed sympathy of Europe brought about the September convention of 1864, by which Louis Napoleon agreed gradually to withdraw the French troops on Italy's stipulation not to allow an attack on the Pope's territory. By the last article of the convention, the capital was removed a step nearer Rome—from Turin to Florence.

In 1866 the Austro-Prussian war, in which Italy took but an inglorious part as the ally of Prussia, added to the kingdom the coveted territory of Venice. In the same year the French garrison was withdrawn from Rome, and Mazzini demanded that the city should be captured. In 1867 Garibaldi and his volunteers gaine a victory near Rome, and the French returned; the volunteers surrendered in November, and the general was arrested. But after the fall of the empire, in 1870, the new foreign

minister of France, Jules Favre, declared the September Convention at an end, and the king, who had only prevented the democrats from moving by arresting Mazzini, was at length free to act as he desired.

Free Italy.

On September 20th he entered Rome, and the emancipation of Italy was completed. The Pope retained the Vatican, the church of Sta Maria Maggiore, the Lateran palace, the villa of Castel Gandolfo, with their precincts, and was voted an income of £150,000 out of the revenues of the state; yet the spiritual sovereign bore but impatiently the loss of his temporal power, and frequent complaints and denunciations were directed from the Vatican against the palace on the Quirinal.

Meanwhile Italy, at last free and united, has become one of the great continental powers, as has been shown in the preceding sections of this article. It will be the hope of all who have followed the story of her long degradation and gallant recovery of freedom that this rapid growth may not, like her earlier precocious development in arts and commerce, be bought at the after cost of premature decay.

The later history of Italy has been uneventful. Brigandage, rife under the tyrannical rule of the Bourbons, and afterwards encouraged by their emissaries, has been gradually suppressed, education and public works have steadily advanced, and in the south the people have become more reconciled—at least, less inveterately hostile—to the laws. In January, 1878, Victor Emmanuel died, and was succeeded by his eldest son, Humbert I. (born 1844); and one

month later Pius IX. died also, and Leo | tions so far is not great; but the govern-XIII. became pope. The most important | ment has been from time to time em-



WORLD RENOWNED CATHEDRAL OF MILAN.

1883 the resumption of specie payment. The popular interest in political ques- rope where the Italian speech prevails.

wide extension of the franchise, and in | the Irredentists, whose aim is to add to the kingdom all those districts of Eu-

In 1883 the ministry denounced the scheme of the association, as aiming indirectly at the downfall of the monarchy and at the same time extolled the triple alliance (of Italy, Germany and Austria), into which Italy, exasperated at the extension of French influence in Tunis, had entered. To this same jeal ousy of French encroachments on the southern Mediterranean shore may be attributed the erection into an Italian colony, in 1882, of a coaling station founded the year before at Assab, on the Red Sea. In 1885 Massowah was occupied, and in 1889 the Italian colonial territory was amalgamated under the name of Eritrea.

In January, 1887, a disaster to the Italian troops brought on a desultory war with Abyssinia, which ended in an arrangement, in 1889, that placed the latter country under Italian protection. In 1888 Signor Depretis, who had

headed eight ministries, was succeeded as premier by Signor Crispi. Since then the main interest of Italian affairs has centered in the finances, and in the struggle to meet, out of the resources of the country, the expenses of the heavy armament.

On the 11th of October, 1897, much excitement was caused in Rome by a popular demonstration against the scheme of taxation on incomes and personal property. The populace came into conflict with the troops, who at length suppressed the uprising. The fiftieth anniversary of the Italian constitution of 1848 was celebrated at Rome in March, 1898, but during May following there were bread riots in various parts of the kingdom on account of the high prices of food, and quiet was restored only by the strong arm of the military power, by which the turbulent uprisings were suppressed.

GREECE IN THE NINETEENTH CENTURY.

HEN the century began Greece was under the sway of Turkey, but the French Revolution had roused the minds of the Greek people into activity, and they were ashamed that a nation which had played such a grand part in the early civilization of mankind should be the slaves of an illiterate and barbarous horde of aliens. The country was ripe for revolt, and a secret society was formed to make ready for a rising of the people.

Accordingly in 1821 the war for independence broke out. The insurrection was begun by Prince Alexander Hypsilantes, an official in the service

of Russia, who had been elected head of the chief secret society. He crossed the Pruth, March 6, 1821, with a few followers, and was soon joined by several men of great bravery at the head of considerable troops. But the expedition was badly managed, and in June, Hypsilantes fled to Austria, having entirely failed in his object. And in all the efforts to overthrow the power of the Turks in the northern provinces the Greeks failed, though some men fought very bravely.

In the Peloponnesus the insurrection broke out also in March in several places, and most prominent among the first movers was Germanos, archbishop of Patras. Everywhere the Greeks drove the Turks before them; they were so successful that in January, 1822, the independence of Greece was proclaimed. But they soon began to quarrel among themselves. The aspirants for honors and rewards were numberless, and they could not agree.

Accordingly a civil war raged in 1823 and 1824, inspired by Colocotronis, a chief who attained great influence, and in 1824 another civil war of short duration, called the War of the Primates. During this period the Greek fleet was very active, and did good service. It was ably led by Miaonlis, a man of firm character and great skill. And he was well seconded by the intrepid Canaris, whose fire ships did immense damage to the Turkish fleet, and filled the Turkish sailors with indescribable terror. For the ravages of the Greek fleet the Turks wreaked fearful vengeance on the innocent inhabitants of the lovely island of Chios, April, 1822, butchering in cold blood multitudes of its peaceful inhabitants, and carrying off others to the slave market. The savage atrocities then perpetrated caused a thrill of horror throughout the civilized world.

Successive Defeats.

Two years after they perpetrated similar outrages on the islands of Kasos and Psara. The sultan now invoked the aid of Mehemet Ali, pasha of Egypt, and his stepson, Ibrahim, landed on the Peloponnesus with a band of well-disciplined Arabs in 1824. Ibrahim carried everything before him, and the Greeks lost nearly every place that they had acquired. Some towns offered a strong resistance, and especially famous is the siege of Mesolonghi, which lasted from

27th of April, 1825 to April 22d, 1826. Nothing could exceed the firmness and bravery displayed by Greek men and women during that siege; and their glorious deeds and sad fate attracted the attention of all Europe.

The interest in the Greeks, which had been to some extent aroused by Lord Byron and other English sympathizers in 1823, now became intense, and volunteers appeared from France and Germany as well as from England and America. Lord Cochrane was appointed admiral of the Greek fleet, and Sir Richard Church, generalissimo of the land forces, but they did not prevent the capture of Athens by the Turks, June 2d, 1827. Most of the European Governments had remained indifferent, or had actually discouraged the outbreak of the Greeks. Russia had disowned Hypsilantes.

Good Fortune for Greece.

The monarchs of Europe were afraid that the rising of the Greeks was only another eruption of democratic feeling fostered by the French Revolution, and thought that it ought to be suppressed. But the vast masses of the people were now interested, and demanded from their governments a more liberal treatment of Greece. Canning inaugurated in 1823, and now carried out this new policy in England. An accident came to the aid of the Greeks. The fleets of England, France, and Russia were cruising about the coasts of the Peloponnesus, to prevent the Turkish fleet ravaging the Greek islands or main land.

Winter coming on, the admirals thought it more prudent to anchor in the Bay of Navarino, where the Turkish fleet lay. The Turks regarded their approach as prompted by hostile feelings and commenced firing on them, whereupon a general engagement ensued, in which the Turkish fleet was annihilated, October 20th, 1827. Shortly afterward, January 18th, 1828, Capodistrias, who had been in the service of Russia, was appointed president of Greece for seven years, the French cleared the Morea of hostile Turks, and Greece was practically independent.

President Assassinated.

But several years had to elapse ere affairs reached a settled condition. Capodistrias was Russian in his ideas of government, and, ruling with a high hand, gave great offence to the masses of the people; and his rule came to an untimely end by his assassination on October 9th, 1831. Anarchy followed, but at length Otho of Bavaria was made king, and the protecting powers signed a convention by which the present limits were definitely assigned to the new kingdom. Henceforth Greece has existed as a recognized independent kingdom.

Throughout the whole of the war of independence in Greece, the people behaved with great bravery and self-sacrifice. They showed a steady adherence to the idea of liberty. They were sometimes savage in their conduct to the Turks, and barbarities occurred which stain their history. Yet on the whole the historian has much to praise and little to blame in the great mass, especially of the agricultural population. But no single man arose during the period capable of being in all respects a worthy leader.

Nor can this be wondered at. All

the men who took a prominent part in the movements had received their training in schools where constitutionalism was the last doctrine that was likely to be impressed on them. Several of them had been in the service of Russia, and had full faith only in arbitrary power. Many of them were accustomed to double dealing, ambitious and avaricious. Some of them had been brought up at the court of Ali Pasha of Jannina, and had become familiar with savage acts of reckless despotism. Others had been and indeed remained during the continuance of the war, chiefs, having but little respect for human life, and habituated to scenes of cruelty and plunder. Some of them also came from the Mainotes, who owed their independence to the habitual use of arms, and who were not troubled by many scruples.

Free Only in Name.

It could not be expected that such men would act with great mercy or prudence in dealing with Turks who had butchered or enslaved their kinsmen and kinswomen for generations. amongst the foreigners who volunteered to aid the Greeks, few if any were found of supreme ability, and after the kingdom was established the Greeks were unfortunate in the strangers who came to direct them. Otho had been brought up in a despotic court, and knew no other method of ruling. He brought along with him Bavarians, to whom he entrusted the entire power, and the Greeks had the mortification of knowing that, though their kingdom was independent, no Greek had a chance of being elevated to any ministerial office of importance.

Accordingly a revolution broke out

in 1843; the Bavarians were dismissed, and Otho agreed to rule through responsible ministers and a representative assembly. But he failed to fulfill his promise. Discontent reached its height in 1862, when another revolution broke out and Otho had to leave Greece. The great mass of the people longed for a constitutional monarchy, and gave a striking proof of this by electing Prince Alfred king of Greece. This choice was determined by universal suffrage, and out of 241,202 Greek citizens who voted 230,016 recorded their votes in favor of the English prince. The vote meant simply that the Greek people were tired of unconstitutional princes, and hoped that they would end their troubles if they had a prince accustomed to see parliamentary government respected and enforced.

Threefold Alliance.

The three protecting powers,—England, France, and Russia,—had however bound themselves to allow no one related to their own ruling families to become king of Greece. When the Greek people received this news, they begged England to name a king, and after several refusals England found one in Prince William of Schleswig-Holstein, son of the king of Denmark. The Greek people accepted him, and in 1863 he became king with the name of George I. Britain added the Ionian islands to his kingdom.

In 1875 the ministry gave great offence to the Greek people by its unconstitutional procedure, but the king persisted in standing by it. The people, however, persevered in the use of legitimate means to oust the ministry; the king at last prudently yielded; and thus a revolution was prevented. The effort of the Greeks to extend their boundaries is the last phase of their history, and is still in progress. In 1853 when the Crimean war broke out, the Greeks sided with the Russians, and in 1854 they made inroads into Thessaly and Epirus, but English and French troops landed at the Piræus, and forcibly put an end to the Russian alliance and to Greek ideas of acquiring additional territory. In 1866 to 1869 the Cretans struggled bravely but unsuccessfully to throw off the Turkish yoke and become a part of the Greek kingdom.

Desperate Battles.

The most important events of recent date in Greek history are connected with the war between Greece and Turkey of 1897, which was declared by Turkey on April 17th. It was claimed by Turkey that the Greeks were violating agreements respecting the boundaries of territory, and also concerning liberties guaranteed to the inhabitants of Crete.

Desperate battles occurred during April of 1897, in most of which the Turkish arms were victorious. In May the mediation of the European Powers was accepted and an armistice was proposed. Cretan autonomy was agreed to by Greece, but the Turkish conditions for ending the war were \$50,000,000 indemnity, the annexation of Thessaly, and several other oppressive demands. Meanwhile a desperate battle at Domoko resulted in the slaughter of nearly 3,000 Turks, but the Greek army was finally forced to retreat, the result being another attempt to end the war.

timate means to oust the ministry; the A collective note of the Powers was king at last prudently yielded; and thus sent to Turkey proposing conditions of

peace. Negotiations were carried on at Constantinople, and the Powers resisted the demands of the Porte as to the annexation of Thessaly and the war indemnity. After much sparring on both sides, Turkey was compelled to submit

to the principal demands of the Powers and the war was terminated. The treaty of peace was signed at Constantinople in December, 1897. The final payment of the war indemnity was made July 10, 1898, by the Powers interested.

TURKEY IN THE NINETEENTH CENTURY.

HE Turkish power was at a very low ebb at the opening of the nineteenth century, and many of the subject nations, both Christian and Mohammedan, sought to throw off the yoke of the sultan and establish their independence. In 1806 Servia revolted under the leadership of Czerni George. It was conquered in 1813, but again revolted in 1815, under Milosh Obrenowitz. Montenegro also rebelled, and until the Crimean war these provinces enjoyed a state of quasi independence. Egypt was also strongly disaffected. In 1809 a war broke out with Russia, which resulted in a further loss of Turkish territory. It was closed by the treaty of Bucharest, by which the sultan ceded to Russia Bessarabia, Ismail and Kilia, one-third of Moldavia, and fortresses of Chotzim and Bender.

In 1807 Selim III. died, and was succeeded by Mahmoud II., under whom the Turkish power continued to decline. The population of the Turkish empire in Europe was about 14,000,000, of whom scarcely 2,000,000 were Turks. The remainder were Christians, consisting principally of the four distinct races inhabiting European Turkey, viz.: the Sclavonians, occupying Bulgaria, Servia, Bosnia, Herzegovina and Montenegro; the Roumanians, occupying Moldavia and Wallachia; the Albanians, dwelling in ancient Epirus, and the Greeks.

The Greeks had never willingly accepted the rule of Turkey, and some portions of them had never submitted to the porte, but had maintained a wild brigandish existence in their mountains. Though the Greeks were attached to Russia by the strong ties of a common religion, that power refused to do anything for their freedom, and Alexander I. met their appeal for aid against their Turkish oppressors with the cold command: "Let the Greek rebels obey their lawful sovereign."

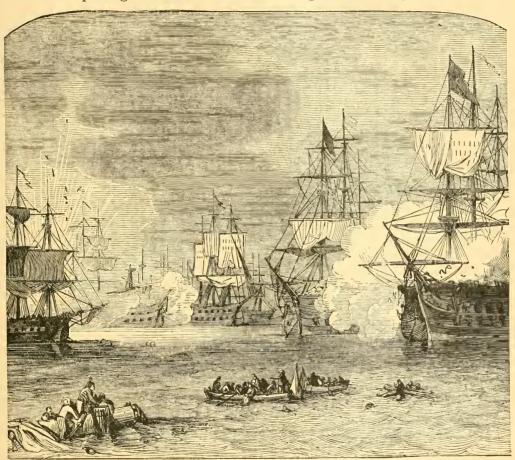
In spite of this discouragement the Greeks determined to throw off the Turkish yoke, and in March, 1821, the first blow was struck. The people of the peninsula and the islands rose in a general revolt. When the news of the revolution was received at Constantinople a general massacre of the Greek inhabitants of the capital ensued. The war went on through the year 1821, the patriot forces winning several important successes, among which was the capture of the Turkish capital of the Morea. In January, 1822, a national congress met at Epidaurus, proclaimed the independence of Greece, and adopted a provisional constitution.

In the spring of the same year the Turks made a descent upon Scio, massacred 40,000 of the inhabitants, and carried away thousands to the slave markets of Smyrna and Constantinople.

In 1823 the admiration and sympathy of all Europe was aroused by the heroic death of Marco Bozzaris, who, with a small band of Suliote patriots, attacked the Turkish camp and fell in the arms of victory.

fore he could accomplish much for the cause he had adopted.

Unable to conquer Greece, the sultan summoned Mehemet Ali, the Viceroy of Egypt, who enjoyed a state of actual independence, to complete the task. The European governments looked | This vigorous leader spread terror and



GREAT NAVAL BATTLE OF NAVARINO.

coldly upon the gallant struggle, but the people remembered the glories of ancient Greece, and supplies of money, arms, and men were sent to the patriots. Foremost among those who devoted their fortunes and talents to the freedom of Greece was Lord Byron. He died at Missolonghi in April, 1824, be-

desolation throughout Hellas. Missolonghi was taken after a heroic defence, and Athens was captured in 1825. The Egyptian forces had orders to make a desolation of Greece, and to carry off the people into slavery.

Alexander I. of Russia fortunately died at this juncture, and the Czar

Nicholas, his successor, adopted a different policy. Moved either by his sympathy with his co-religionists or by his anxiety to weaken Turkey, he resolved to intervene in behalf of the Greeks, and was joined by France and England, who were anxious to impose a check upon the Egyptian viceroy. These powers sent a strong combined leet to the Mediterranean. On the 20th of October, 1827, this fleet, under the command of the English Admiral Codrington, accidentally encountered the Turkish and Egyptian fleet in the Bay of Navarino. A battle ensued, which resulted in the destruction of the Mohammedan fleet.

Crete and Syria.

This success revived the hopes of the Greeks, and the next year Russia declared war against Turkey; and the sultan, in order to save his Danubian provinces, was obliged to sign the treaty of Adrianople, by which he acknowledged the independence of Greece.

Mehemet Ali was given the sovereignty of Crete by the sultan for his services in the Greek revolution. Not satisfied with this acquisition, he sent his son Ibrahim Pasha, an able commander, in 1831, to conquer Syria. That country was overrun by the Egyptian forces, who also advanced towards Asia Minor. Their progress was at length stayed by the intervention of Russia, England, and France, whose forces defeated Ibrahim at Nisibis on the Euphrates. A few days after this battle Sultan Mahmond died. France was anxious that Mehemet Ali should succeed him, but England and Russia drove him out of Acre and Syria, and secured the Turkish throne for Abdul Medjid, the young son of Mahmoud.

In 1840 the treaty of London was signed. Crete and Syria were restored to the Porte, and Mehemet Ali was limited to Egypt. For many years after this Sir Stratford Canning, afterwards Lord Stratford de Redeliffe, the English Ambassador at Constantinople, controlled the counsels of the Porte. By the treaty of London, Egypt became to a certain extent an independent State, though owning a nominal allegiance to the sultan

The Crimean War.

In 1851 began the troubles which resulted in the Crimean War, which we have related elsewhere. The treaty of Paris, in 1856, which brought this war to a close, admitted Turkey to the European system of states, and guaranteed the integrity of her dominions. Servia was given a native prince, and was placed under the protection of the great powers, though she retained a nominal allegiance to the sultan. Moldavia and Wallachia, a few years later, were erected into a similarly independent state under the name of Roumania.

In 1861 Abdul Medjid died, and was succeeded by Abdul Aziz. In 1868 a formidable insurrection broke out in the island of Crete or Candia. It aroused great sympathy among the European people, and came near producing a war between Greece and Turkey, but was quelled during the following year by the Turks.

Mehemet Ali was succeeded as Viceroy of Egypt by his son Ibrahim Pasha, under whose vigorous rule Egypt made great progress. He died in 1848, and Abbas Pasha became viceroy, and was

in his turn succeeded by Ismail Pasha, the reigning khedive.

In 1867 the Sultan Abdul Aziz visited Paris and London and the principal cities of Europe. This was the first time a Turkish sovereign ever made a peaceful journey beyond the limits of his own empire.

The result of the war between France and Germany, in 1870-71, affected Turkey in a most important respect. treaty of Paris, which closed the Crimean War, placed a restriction upon the aggressive power of Russia by neutralizing the Black Sea. The reverses of France in her contest with Germany so weakened her that she was unable to sustain England in upholding the treaty of Paris. Russia promptly took advantage of this to demand of the powers a modification of those articles of the treaty which prevented her from fortifying her ports or maintaining an armed fleet in the Black Sea.

A New Treaty.

England warmly opposed the demand, but France was in no condition to do so, and Germany and the Austro-Hungarian monarchy gave their moral support to the Russian demand, and avowed their intention not to co-operate with England in any armed resistance to it. The result was that a conference of the representatives of the powers was held in London, and on the 13th of February, 1871, a treaty was signed by them abrogating the articles of the treaty of Paris as to the navigation of the Black Sea and the right of Russia to fortify her ports. The protection afforded to Turkey by the great powers was thus taken from her.

In 1873 the sultan's authority over

Egypt was further weakened by the concessions which made the khedive almost an independent sovereign, and which we have related in the history of Egypt.

In the summer of 1875 an insurrection broke out in Herzegovina. The misrule and oppression of the Turkish government had come to be insupportable, and the inhabitants rose in rebellion and repulsed the attacks of the Turkish troops. Servia, Bosnia, Montenegro and Bulgaria, were profoundly excited by these events, and were open in their sympathy with their struggling Christian brethren in Herzegovina. Substantial aid was also rendered by the people of those countries, the governments of which for a time remained neutral.

Turkey Bankrupt.

In October, 1875, Turkey failed to meet the interest on her national debt. the principal of which amounted to over \$900,000,000. A decree was issued by the porte promising speedy payment of half the interest and making provision for the payment of the other half. The promise was not fulfilled, and in July, 1876, the porte was compelled to declare its insolvency by stating that all payments on account of the national debt. must cease until the close of the war with its revolted provinces. As nearly every dollar of this debt was due to citizens of Western Europe, principally English subjects, the failure of the Turks to meet their obligations greatly weakened the friendship which, up to this time, the English people had felt for them.

On the 30th of May, 1876, the Sultan Abdul Aziz, to whose mismanagement many of the troubles of the country

were due, was forcibly deposed, and placed in confinement in one of the palaces at Constantinople. On the 4th of June he was found dead in his chamber, having committed suicide.

Murad (or Amurath) V., the son of Abdul Medjid, was proclaimed sultan in the place of his uncle. His reign was a brief one. He proved so hopelessly imbecile that, on the 31st of August, 1876, he was in his turn deposed, and was succeeded by his brother Abdul Hamid II.

Massacre of Christians.

In the meantime the war with Herzegovina had been carried on. In October, 1875, the sultan declared that the taxes which had been one cause of the revolt, should be lowered from their excessive rate to ten per cent., that arrears of taxes should be abandoned, and that the Christians should be granted a representation in the state councils. Christians had learned from long experience to distrust these promises, and the war went on. In October, 1875, some Christians who had come back to their homes from Dalmatia were massacred by the Turks, and the struggle became more bitter in consequence of this act. Servia and Montenegro secretly gave aid to the rebels, and the Prince of Servia declared in a speech to the national assembly that it was impossible for Servia to be indifferent to the fate of the Herzegovines.

It was feared by the European powers that the troubles in Turkey might be the means of embroiling other countries in the war, and near the close of the year 1875, Germany, Austria, and Russia made a combined effort to secure peace. Austria, whose territory ad-

joined the Turkish dominions, was especially fearful that the revolt would extend across her border and involve her Sclavonic possessions. A joint note was drawn up in the name of the three powers by Count Andrassy, the Austrian Prime Minister. proposed to the sultan to grant certain reforms to his Christain subjects. These were the establishment of complete religious liberty; the abolition of the system of farming out the taxes; the application of the revenue arising from indirect taxation in Bosnia and Herzegovina to the general purposes of the Ottoman government, and the employment of the results of the direct taxation in the improvement and government of those provinces.

Turkey Makes Promises.

The Porte accepted all the reforms but the disposition of the taxes, at the same time promising to set aside a certain sum from the national treasury for the local wants of Bosnia and Herzegovina. The insurgents were not willing to trust the pledges of the Porte, however, and the war went on. On the 30th of March, 1876, an armistice was concluded, and an effort was made by an agent of the Austrian government to effect a settlement. The terms demanded by the insurgents were so extravagant, however, that Austria refused to consider them.

The Andrassy note having failed, a note was drawn up at Berlin on the 11th of May, 1876, by the Prime Ministers of Germany, Austria, and Russia, and forwarded to Constantinople. It stated peremptorily that as the sultan had given the powers a pledge to execute the reforms proposed by them, he

had also given them a moral right to insist that he should fulfill his promise. The note then demanded an armistice of two months, and closed with a threat that if the sultan failed to comply with the demands of the powers, they might find it necessary to compel him to do so.

The note substantially supported the demands of the Christians of Herzegovina with respect to taxation and the restoration of their property, etc. France and Italy agreed to support the note, but England declined to do so.

The war had gone on in the meantime, and Bulgaria had become to some extent involved in it. Early in May the Turkish officials in Bulgaria determined to put a stop to the troubles in that province by the wholesale extermination of the Bulgarian Christians. A systematic plan was arranged for this purpose, and at the appointed time the Christiaus were attacked in their villages by the Turks. Many hundreds were massacred in cold blood, including people of all ages and both sexes; women were outraged, property carried off or destroyed, and villages burned.

Great Indignation.

The news of the massacre sent a thrill of horror and indignation throughout Europe, and the Turks were denounced in unmeasured terms. In England, which country had until now given its moral support to Turkey, the outburst of indignation was intense, and the popular feeling was so outspoken that the government was compelled to pause in its support of the sultan and act more in sympathy with the other European powers.

An immediate result of the massacres was the active participation of Servia

in the war. In July, 1876, both Servia and Montenegro declared war against Turkey. The Servian army attempted to invade Bulgaria, but was so unsuccessful in its efforts that on the 24th of August Prince Milan accepted the offer of England to mediate between him and the sultan. Montenegro had been generally successful in her efforts, but, in view of the action of Servia, consented to treat for peace. On the 1st of September England proposed an armistice of a month between the belligerents.

War Resumed.

The sultan refused to grant this, but declared himself willing to make peace on condition that Prince Milan should come to Constantinople and do homage to him, that Turkish garrisons should be placed in four of the Servian fortresses, that Servia should pay an indemnity, and that the porte should be allowed to construct and work a railroad through Servian territory. The powers refused to allow these terms to be discussed. Great Britain now proposed as a basis of negotiation that Bosnia and Bulgaria should be given local self-government without being freed from the dependence upon the porte. Prince Milan refused to accept this proposal, and the war was resumed. The Turkish armies now prepared to invade the territory of Servia, but were checked by the interposition of Russia.

Up to this time the action of the Russian government had been entirely conservative, being confined to its participation in the preparation of the diplomatic notes addressed to Turkey. Now large numbers of Russian officers and soldiers entered the Servian army with

the consent and approval of the czar. They enabled the Servians to hold out against the Turks until the 31st of October, when the fortified city of Alexinatz was captured by the latter. This success placed Servia practically at the mercy of Turkey. In the meantime orders had been sent to the Russian ambassador at London to inform the British government that it was the opinion of the czar that force should be used to stop the war and put an end to Turkish misrule.

Plan of Reform.

Lord Derby stated that England was prepared to unite with Russia in bringing about an ármistice of not less than a month, but would not support an armed intervention in Turkish affairs. At this juncture Turkey, to the surprise of all the powers, suddenly offered an armistice for six months, and announced a scheme of reform for the whole empire. England, Austria and France favored the armistice, but Russia declared that she could not ask Servia to accept so long a truce since the principality could not keep its army on a war footing for so long a time; and this view of the case was supported by Italy.

Russia demanded a truce of four or six weeks. The Turkish forces were pressing the siege of Alexinatz with energy, and it was apparent that that place could not hold out much longer. Genarial Ignatieff, the Russian ambassador at Constantinople, was therefore ordered to demand of the porte an acceptance within forty-eight hours of the armistice proposed by Russia. The demand was made on the 31st of October, and on the same day Alexinatz was captured by the Turks. The Russian demand was

granted by the porte, and the armistice was proclaimed.

Although determined to support Servia against Turkey, Russia was anxious to maintain friendly relations with the other European powers. On the 2d of November Lord Adolphus Loftus, the English ambassador, had an interview with the czar at Livadia. The czar "pledged his sacred word and honor" that he had no intention of acquiring Constantinople, and that if necessity compelled him to occupy a portion of Bulgaria it would only be provisionally, and until the safety of the Christian population was assured.

A British Threat.

These assurances gave great satisfaction to the English government, which now assumed the initiative in proposing a general conference of the representatives of the great powers of Europe to meet at Constantinople. On the 4th of November the Marquis of Salisbury was appointed the English representative. The proposal was accepted, but all the powers did not send special representatives. Germany, Russia and Italy considered their ambassadors at Constantinople sufficient; but Austria and France followed the example of England, and sent special representatives to assist their resident ambassadors.

Before the conference assembled the Earl of Beaconsfield (Disraeli), the English premier, delivered a speech sharply criticising the Russian attitude, and closed it with significant words: "While the policy of England is peace, no country is so well prepared for war." The next day, November 9th, the czar, in an address to the nobles and communal council of Moscow, said: "I

hope this conference will bring peace; should this, however, not be achieved, and should I see that we cannot attain such guarantees as are necessary for carrying out what we have a right to demand of the Porte, I am firmly determined to act independently." These words were generally regarded as a reply to Lord Beaconsfield's threat, and caused considerable excitement in Europe, as they implied a possibility of war between Russia and England.

Lord Salisbury reached Constantinople on the 5th of December. On his journey from London he had visited Paris, Berlin, Vienna, and Rome, and had ascertained the views of those governments with respect to the Eastern question. Immediately upon reaching Constantinople he entered into communication with the porte and with the foreign ambassadors and representatives. He was encouraged by this intercourse to believe that the conference would result in a satisfactory settlement of the troubles. Turkey seemed willing to accept a fair proposition of settlement, and the Russian ambassador was especially cordial in co-operating with Lord Salisbury.

Government Revolutionized.

Before the conference assembled, a very decided change took place in the policy of Turkey. On the 22d of December Midhat Pasha was made grand vizier. The true meaning of this appointment was that Turkey had resolved to take her affairs into her own hands and to refuse to submit to the dictation of the European powers. On the 23d the Porte proclaimed the new constitution of the Turkish empire which had been prepared by Mid-

lict Pasha. This constitution entirely revolutionized the Turkish government. It provided for a parliament elected by the people, and made the sultan a constitutional instead of an arbitrary sovereign. The government was to be administered by Ministers responsible to Parliament, which body was to enact the laws necessary for the pacification and government of the empire.

Failure of Conference.

The conference met on the 23d of December, the very day of the promulgation of the constitution. On the 28th of December it was resolved to extend the armistice to March 1, 1877. The proclamation of the constitution seemed to cut the entire ground from under the feet of the conference. The representative of the porte maintained that further deliberation was unnecessary, since the constitution was a sufficient answer to the powers. Nevertheless the sessions were continued, but without accomplishing anything. The conferenre demanded that the reforms in the Turkish empire should be executed by an international commission, having at its command a special military force, composed partly of Europeans and partly of Turks, but Turkey refused to accept the demand, and it was abandoned.

Though Turkey was willing to pledge herself for the execution of the reforms, she steadily refused every material guarantee for the execution of this pledge suggested to her. The conference then reduced its demands to insisting that the Governors of Bosnia and Bulgaria should be appointed with the consent of the powers, and that the powers should be allowed to form an international commission, which should, however,

have no military means of executing its decrees. On the 18th of January, 1877, the porte firmly rejected these demands, and the conference came to an inglorious end.

During the sessions of the conference Roumania became alarmed at the terms of the constitution, the first article of which declared that the Ottoman empire, including the privileged provinces, forms an indivisible unity from which no portion can ever, on any ground, be detached, while the seventh article gives to the sultan the right of investiture of the rulers of the privileged provinces. On the 5th of January, 1877, the Roumanian senate passed a resolution declaring that the rights of the principality should remain intact, and calling upon the government to maintain them in a manner worthy of the state. excitement in Roumania was so great that in a few days the porte officially declared that the constitution was purely internal, and did not affect the rights of a principality which were guaranteed by international treaties.

A Nation Without Friends.

The obstinacy of Turkey in refusing the demands of the powers lost her the few friends she had left in Europe. The cause of this obstinacy was the Vizier Midhat Pasha, who, losing sight of the fact that the Turkish empire owed its existence in Europe entirely to the mutual jealousy of the great powers, haughtily refused to allow any interference with its affairs. His imperious will soon rendered him obnoxious to the sultan, who grew restless under the control of the man who had already deposed two sultans within a year, and who would not hesitate to

depose another should it suit his purpose.

Accordingly on the 5th of February, 1877, Midhat Pasha was removed from his office of vizier and ordered to quit Constantinople. He was succeeded by Edhem Pasha, who had served as one of the members of the conference, and who had distinguished himself by his bitter opposition to all the proposals of the foreign representatives.

Efforts for Peace.

Edhem Pasha at once devoted himself to the task of making peace with the rebellious principalities. He opened negotiations with Servia, and by the last of February concluded a treaty of peace with that principality. By the terms of the treaty the Servians were to retain their fortresses, were to salute the Turkish flag, and were to prevent armed bands from crossing the frontier. The Turkish troops, on their part, were to evacuate the positions held on Servian territory. The treaty was ratified on the 3d of March, and a week later the Turkish forces withdrew from Servia, relinquishing Alexinatz and Saitschar to the Servians.

Negotiations had been opened with Montenegro at the same time that those with Servia were begun, but they proved more protracted and troublesome. Prince Nicholas at first demanded that the negotiations should be conducted at Vienna; but the Porte refused this, and the prince sent a delegation to Constantinople. The armistice was extended to the 13th of April. The Montenegrin demands were, briefly, the cession of Nicsics, which had been besieged by their forces for several months, the cession of a seaport, and such a rectifica-

tion of their frontier as would increase their territory about one-half its present extent.

As the Montenegrins held actual possession of most of the territory demanded by them, they had the advantage of the Porte. The latter refused to grant any extension of territory, and towards the close of March Prince Nicholas instructed his representatives to abate their demands somewhat, but to insist upon the cession of Nicsics. On the 10th of April the Turkish parliament, to which the matter was referred, rejected the demands of Montenegro, and the next day the representatives of that principality were informed of this decision, and were told that the armistice would not be renewed. Two days later the Montenegrin delegates set out for home, going by way of Odessa, in order to have an interview with the czar and the Russian commander.

Trying to Gain Time.

Russia had by this time fully determined to take part in the war, but being as yet unprepared, endeavored by skillful diplomacy to gain time. On the 31st of January Prince Gortschakoff addressed to the Russian representatives at the courts of the powers concerned in the treaty of Paris a circular, in which he related the diplomatic efforts that had been made to secure the pacification of Turkey, and stated that the czar, before determining upon a course for the future, wished to know what course would be determined upon by the other powers. On the 9th of March Turkey met this circular by one of her own addressed to the guaranteeing powers, stating that "the reforms proposed by the conference

and accepted by the imperial government are already being applied."

On the 19th of March the Turkish parliament was formally opened with imposing ceremonies and renewed promises of reform. The great powers, however, were suspicious of Turkey's promises, and were determined to demand further guarantees. Accordingly the Russian, French, German, Austrian and Italian ambassadors at London held several conferences with Lord Derby, the British foreign minister, the result of which was the signing, on the 31st of March, of a protocol by them in behalf of their respective governments.

Turkish Government Watched.

This document declared that "the powers proposed to watch carefully, by means of their representatives at Constantinople and their local agents, the manner in which the promises of the Ottoman government are carried into effect;" and in case these promises were not faithfully earried out, the powers reserved the right of common action "to secure the well-being of the Christian population and the interests of the general peace." Before signing this document Count Schouvaloff, the Russian ambassador, made a declaration to the effect that if the porte showed itself ready to disarm, it should send a special envoy to St. Petersburg to treat for a mutual disarmament. Lord Derby, on behalf of Great Britain, declared that if a reciprocal disarmament and peace did not result, the protocol was to be regarded as null and void.

The answer of the porte to the protocol was a defiant circular addressed to its representatives abroad, in which, while it did not entirely reject the protocol, it warmly resented the threat of foreign intervention in the internal affairs of Turkey, repelled Count Schouvaloff's suggestion of intervention, and declined to send a special envoy to St. The circular was dated Petersburg. the 10th of April. When the Turkish ambassador in London delivered this circular to Lord Derby on the 12th of April, the British foreign minister expressed to him his deep regret at the course Turkey had seen fit to pursue, and said he could not see what further steps England could take to avert the war, which now seemed inevitable.

Every effort for peace having failed through the obstinacy of the porte, Russia declared war against Turkey on the 24th of April, 1877, an account of which is given elsewhere.

In 1897 the whole civilized world was shocked by Turkish atrocities in Armenia. The slaughter of 40,000 Armenian Christians, if not by direct orders from the Turkish government, yet certainly with permission from those who could have put a stop to these inhuman out-

rages, forms one of the most revolting pages of history. England and America were aroused by these bloody atrocities, which were considered to be quite in keeping with the Turkish character and methods, and vigorous protests were made, both in public meetings and through the newspaper press.

Turkey disavowed responsibility as far as possible for these wholesale murders, which was only to be expected. It was an outbreak of Mohammedan fanaticism, and it was felt that our government would be justified in taking the strongest measures for the protection of American missionaries and their families. Large sums of money were raised in England and this country for the relief of the sufferers. A great public meeting was held in Liverpool, which was presided over by Mr. Gladstone, who denounced with all his burning eloquence the murders committed by barbarous Turkey, After the crime was ended public indignation became quiet, and Turkey had accomplished her object without being called to a solemn account by other nations.

SPAIN IN THE NINETEENTH CENTURY.

PON the return of peace, in 1815, after the Napoleonic wars, Ferdinand VII. was restored to the throne of his fathers. He at once re-established the Inquisition and the convents which had been suppressed by the French. Tyranny was restored in its most odious form, and the Spanish people found that all their struggles against Napoleon had ended in the loss of their freedom.

The Spanish colonies in America, encouraged by the example of the United

States, had renounced their allegiance to Spain in 1810, upon the fall of Ferdinand, and had proclaimed their independence. Upon his return to his throng Ferdinand set to work to recover these colonies. He made great exertions and spent large sums to reconquer them, but in the end failed, and the dominion of Spain on the American continent came to an end. The struggle with the colonies exhausted the Spanish treasury and left the army unpaid and half mutinous and the nation discontented.

The result was a revolution in 1820, which compelled Ferdinand to abolish the Inquisition and the convents, and restore the liberal constitution of 1812. The Holy Alliance now intervened, and demanded the abolition of this constitution and the restoration of absolutism. The cortes refused to comply with this

incline him to a more liberal course, but he turned a deaf ear to them and punished the liberal leaders that fell into his power with savage cruelty. So great was the discontent of the Spanish people that Ferdinand was only upheld on his throne by the French troops, who remained in Spain for seven years.



THE ESCURIAL—THE PALACE OF THE KINGS OF SPAIN.

demand, and Spain was invaded in 1823 by a French army under the Duke of Angouleme. The liberals were defeated in every quarter, and Cadiz, their last stronghold, was taken in 1823. Ferdinand VII. was restored to his absolute rule, and proceeded to take vengeance upon his enemies.

The French generals endeavored to

In 1833 Ferdinand died, leaving two daughters, the elder of whom was but three years old. In September, 1830, he had issued a pragmatic sanction, which annulled the law excluding women from the Spanish throne. Upon his death his brother, Don Carlos, produced a paper which he claimed was signed by Ferdinand, which revoked

the pragmatic sanction, and which Don Carlos offered in support of his own claim to the crown.

Spain was at once divided between two parties—the liberals, who supported the regency of the queen-mother, Christina of Naples, and the Carlists, or partisans of Don Carlos. England and France favored the former, but the pope and the northern powers sustained Don Carlos. A civil war ensued, and the liberals finally triumphed, and procured the acknowledgment of the young queen Isabella II. Don Carlos, however, continued the war until 1840, when he was finally defeated and forced to abandon the struggle.

Royal Marriages.

A considerable party desired that the young queen should marry her cousin, the Count of Montemolin, the son and heir of Don Carlos, a union which would have united all the claims to the crown, and have restored peace to Spain. France and England, however, opposed this union, and Louis Philippe resolved to make Queen Isabella's marriage the means of strengthening his dynasty. He succeeded in inducing her to marry her cousin, Don Francisco of Assis, who was little better than an idiot, and at the same time married his youngest son, the Duke of Montpensier, to the Princess Maria Louisa, the sister of Queen Isabella, and who, from her more vigorous health, seemed likely to outlive her sister. This cunning scheme, so characteristic of the selfish king of the French, resulted in more injury than benefit to the Orleans monarchy.

In 1843 Queen Isabella was declared of age, and from this time Spain was governed as a constitutional state. The

queen, who was a woman of notoriously evil life, took but little part in the government, which was administered principally by her favorites and a succession of popular generals. The result was that the kingdom was almost constantly in a state of civil war. In 1868 Gonzales Bravo became prime minister. caused the arrest and banishment of seven of the leading generals of the army, and also of the Duke and Duchess of Montpensier, the latter of whom the reader will remember was the sister of the queen. The banished generals each had adherents in the army, and a revolution at once broke out. queen's troops were defeated, and she herself was driven out of Spain. took refuge in France. The Bourbon dynasty was declared at an end in Spain and a provisional government was set up in Madrid, with Marshal Serrano, one of the banished generals, at its head.

Continued Dissensions.

The unhappy kingdom was once more divided as to the form of government it should adopt. A small, cultivated class wished to set up a republic, but the great body of the nation desired a constitutional monarchy. Don Carlos, a grandson of the queen's uncle of the same name, proclaimed himself king as Charles VII., and was supported by a considerable party. In June, 1870, Queen Isabella abdicated her crown in favor of her son, the Prince of Asturias, then eleven years old, and his claims were supported by the French government, which hoped through him to establish its influence in Spain. The Spanish nation, however, refused to accept him. The crown was then offered to the King of Portugal, who

declined it for both himself and his brother.

General Prim, who had become the ruling spirit of the Spanish Government, then selected Prince Frederick, of Hohenzollern-Sigmaringen, a distant relative of the King of Prussia. The invitation was declined by Prince Frederick in the summer of 1870, and was transferred to his younger brother, Prince Leopold. The French Government, as we have seen, made this choice the pretext for war with Prussia. Prince Leopold, in consequence of this, declined the Spanish invitation.

Deeds of Violence.

After this the Spanish crown was offered to Amadeo, Duke of Aosta, the second son of Victor Emmanuel, King of Italy, and was accepted by him. was formally chosen by the cortes on on the 16th of December, 1870. A few days later he set out for Spain, landing at Carthagena. The festivities attending his arrival were brought to an end by the assassination of General Prim, the wisest and best of Spanish statesmen of the time, on the 29th of December. On the 30th King Amadeowas crowned, and gave his consent to a liberal constitution, which guaranteed civil and religious liberty to the nation.

Amadeo found his throne anything but a bed of roses. The liberal party desired still great changes, and the adherents of Don Carlos, supported by the constant intrigues of the priests, were plotting the overthrow of the liberal monarchy. In April, 1872, the Carlists rose in open rebellion in the northern provinces; and on the 19th of July in the same year a dastardly attempt was made to assassinate the king and queen.

Thoroughly disgusted with his subjects, Amadeo resigned his crown on the 11th of February, 1873. His abdication was followed by the proclamation of a republic, which, in 1875, gave place to a monarchy under Alfonso.

Castelar was made president of the new republic, which, a year later, was overthrown. Alfonso XII. was proclaimed king December 30, 1874. Ten days later the king landed at Barcelona, and prepared to enter upon his reign. The year 1876 was signalized by the end of the Carlist war and the restoration of peace. Alfonso died November 25th. 1885, and was succeeded by the regent, Queen Christina. On the opening of the cortes, December 1st, 1887, the infant King was enthroned, and in a speech read on that occasion the queen-regent announced that the country was quiet and prosperous. During October, 1888, there was a republican outbreak at Saragossa against conservatives; soon afterward outbreaks occurred at Seville and Madrid. The ministry resigned December oth, and was reconstituted by Senor Sagasta.

Spanish Republic

In the early part of 1889 amnesty was offered to political offenders, and efforts were made to suppress discontent.

In April, 1898, war broke out between Spain and the United States, in which the former was disastrously defeated. Her navy was swept from the sea, and she was compelled to relinquish Cuba, Porto Rico and the Philippine Islands. The details of the struggle have been narrated in the history of the United States in the nineteenth century, and need not be repeated here.

CHAPTER XV.

Canada, Mexico and South America.

N 1791 the British parliament divided Canada into two provinces, called Upper and Lower Canada, and gave to each a legislative council appointed by the crown, and a popular assembly chosen by the people. Over each province was placed a governor appointed by the crown. In the hope of inroducing the Church of England as the religious establishment of the provinces, an area of 3,400,000 acres of the public land was set apart for the endowment of the clergy. The effort proved a failure, and in 1854 the lands were devoted to ecular purposes, and the idea of estabishing a state church was abandoned.

The provinces grew steadily in population and prosperity, and if their advance was not as rapid as that of their southern neighbor, the United States, yet it was as substantial. As the bitter feelings engendered by the war died away, cordial relations sprang up between Canada and the United States, and a profitable commerce was inaugurated between them, and grew steadily year by year until it attained its present vast proportions.

The introduction of steamboats upon the St. Lawrence and the lakes did much to promote the growth of Canada, and increased its internal and foreign commerce in a marked degree. In 1824 the Welland canal was begun, and was completed in 1829, giving a continuous water passage from Lake Ontario to Lake Erie. It was followed by the Lachine and other canals, all of which have been important agents in the growth of Canadian commerce.

In the early part of the nineteenth century a bitter dispute arose in Canada concerning the proper interpretation of the act of parliament for the government of the two provinces. One party insisted that Canada was in possession of a transcript of the British constitution, and that the council, which constituted the advisers of the governors in matters of state, should be responsible to the popular assembly. The other party maintained that the council was responsible to the governor only, and that the assembly had no claim upon it. The disputes ran very high, and the trouble was increased by the general course of the governors of the provinces, who administered their governments in an arbitrary manner, paving little attention to the popular assembly, and utterly disregarding the demands of the people.

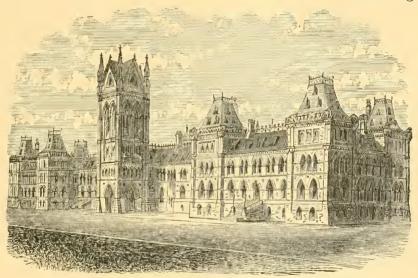
Canadian Rebellion.

In Lower Canada the popular discontent was very great, and in 1837 a portion of the inhabitants of that province, under the leadership of Louis Joseph Papineau, took up arms with the avowed purpose of throwing off the rule of Great Britain. They were defeated by the government troops in a series of engagements, and were at length compelled to submit. Papineau and the other leaders fled the country. In December, 1837, the popular party of Upper Canada, indignant at the arbitrary measures of Sir Francis Head, the governor, rose in rebellion under the leadership of William Lyon Mackenzie. The revolt was suppressed by the government forces after some serious conflicts with the insurgents.

For some weeks the insurgents had possession of Navy Island, situated in the Niagara river, just above the falls. Considerable sympathy was manifested for them by the people of the State of New York, and substantial aid was rendered them in spite of the efforts of the President of the United States and the governor of New York to prevent

moored at her dock. The boat was captured after a short struggle, in which one American was killed, and was carried out into the stream and set on fire. She drifted down to the falls, and plunged over them in a blaze. The British Minister at Washington at once declared the responsibility of his government for the capture of the boat, and justified it on the ground of self-defence.

the President of the United States and In the meantime the President had the governor of New York to prevent sent General Wool with a strong force to



PARLIAMENT HOUSE, OTTAWA.

it. Navy Island forms a part of Canada, and lies near the shore of that country. The insurgents in possession of the island employed the steamboat Caroline to convey men and provisions from the town of Schlosser, on the American shore, to the island.

The British authorities in Canada determined to destroy the boat. One dark night in December, 1837, a detachment from Canada was sent to Navy Island for this purpose. Not finding the Caroline there, they went over to Schlosser, where she was

the Canadian border with orders to prevent any expedition from leaving this country to aid the Canadians. He compelled the force on Navy Island to surrender, but the border war continued until the close of 1838, when it was ended.

These outbreaks drew the attention of the British government more closely to the defective system of government in operation in Canada. The people of Canada addressed petitions to the crown, praying for a union of the provinces. This prayer was granted, and in 1841 the two provinces were united under

one government, which was modeled upon the British system, and was in every respect a vast improvement upon the former establishments. The country was now styled the Province of Canada. In 1849 a general amnesty to all who had taken part in the rebellion of 1837 was passed.

In 1849 a bill was introduced into the Canadian parliament to indemnify certain persons for the losses sustained by them during the rebellion. This measure was bitterly opposed by the

vaded by the Fenians, an organization of Irishmen dwelling in the United States. This insane movement was met promptly by the Canadian authorities, and the President of the United States sent General Meade, with a sufficient force of troops, to the Canadian border to arrest the Fenian leaders and to seize their supplies.

On the 4th of December, 1866, delegates appointed by the legislative assemblies of Canada, Nova Scotia, and New Brunswick met at London to



UNIVERSITY OF TORONTO.

people of Montreal, and gave rise to a formidable and disgraceful riot, in which the parliament was dispersed and the parliament house burned down by the mob. This riot induced the parliament to remove the seat of government to Toronto for the next two years, and to Quebec for the four succeeding years. In 1857 Ottawa was selected as the permanent seat of government, and costly public buildings were erected there for the use of the various departments of the state.

In the spring of 1866 Canada was in-

arrange the terms of a confederation. This task was successfully performed, and on the 7th of February, 1867, a bill was introduced into the British parliament creating the union. It passed both houses, and on the 29th of March received the royal assent. On the 22nd of May the queen issued her proclamation appointing the 1st of July, 1867, as the day from which the new confederation should date its existence.

The new State was styled the Dominion of Canada, and was given the right of self-government. The Gov-

ernor-General of Canada is appointed by the crown, but all the other offices are filled by the people or by their chosen delegates. Canada is thus practically independent of Great Britain, though constituting an important part of the British empire, and owing allegiance to the British sovereign.

Purchase of Territory.

In 1870 Manitoba and the northwest territories were purchased from the Hudson Bay Company and added to the dominion. In 1871 British Columbia joined the confederation, and in 1873 Prince Edward's Island did likewise.

Since the confederation of the provinces the chief events have been as follows: the Red River rebellion, which collapsed in August, 1870; treaty of Washington, 1871, dealing with fisheries and the mutual use of certain canals; outbreak of half-breeds under Louis Reil, in March, 1885, resulting in the speedy suppression of the rebellion and Riel's execution; and the treaty for the settlement of the fisheries dispute, signed by the British and United States representatives February 15, 1888. In October, 1891, the Dominion government refused to acquiesce in the copyright treaty between England and the United States, claiming that the treaty was not international.

On the 29th of July a motion for unrestricted reciprocity with the United States was rejected after a long debate in the house of Commons.

The Great Canadian Pacific Railroad was completed in 1891. Entrance to New York was given over the New York Central lines. It was universally

believed that the completion of this important railway would have much to do with the development of the resources of Canada, especially the mining industries of British Columbia, and this has proved true.

In 1892 an attempt was made to bring about a more complete reciprocity between Canada and the United States. Representatives of both countries were appointed to take the subject into consideration and recommend practical methods by which closer commercial relations could be established. Unfortunately the negotiations amounted to nothing, and were discontinued in June of that year. The subject, however, was not allowed to drop, but was favorably discussed in a convention at Ottawa called in 1893 for the purpose of promoting tariff reform.

Vast Wealth of Mines.

In January, 1897, a Toronto syndicate purchased the War Eagle mine in British Columbia for the sum of \$850,000. This purchase had much to do with stimulating the mining interests of that province. Attention was called to the great mineral wealth of that section, which resulted in large investments on the part of Canadian capitalists and others in the United States.

The discovery of gold in the Kloudike region caused a great rush to the gold fields, and necessitated special legislation by the Canadian Parliament for the right adjustment of claims and the preservation of law and order. During the year large sums of gold arrived at Victoria, British Columbia, and along with them tales of suffering and privation endured by many of the miners.

MEXICO IN THE NINETEENTH CENTURY.

EXICO has been the scene of many revolutions, and for centuries was in a state of almost constant turmoil. This can be accounted for by Spanish greed and oppression, which the people from time to time resisted, being as often overcome by superior force after suffering many indignities and after convulsions which frequently resulted in great loss of life.

Insurgents Executed.

The overthrow of the reigning house of Spain, and the elevation of Joseph Bonaparte to the Spanish throne, caused profound discontent in Mexico. classes resented it. It became necessary to make certain modifications in the government to suit the altered state of affairs. On the 16th of September, 1808, the viceroy, Don José de Iturrigaray, was arrested and imprisoned on suspicion of a design to seize the crown of Mexico. This act greatly increased the popular discontent, and the aspirations for independence took, as it were, new life from this moment. On the 15th of September, 1810, a formidable revolt broke out in the province of Guanajuato, under the leadership of Don Miguel Hidalgo, a priest. It was suppressed the next year, and Hidalgo and the other leaders were shot.

This revolt was followed by a guerilla warfare of several years, under the leadership of Morelos, Victoria, Guerrero, Bravo, Rayon, and Teran. The patriot forces were compelled to cling to the mountains, but their unceasing resistance kept alive the long-cherished hope for independence. It seemed, however,

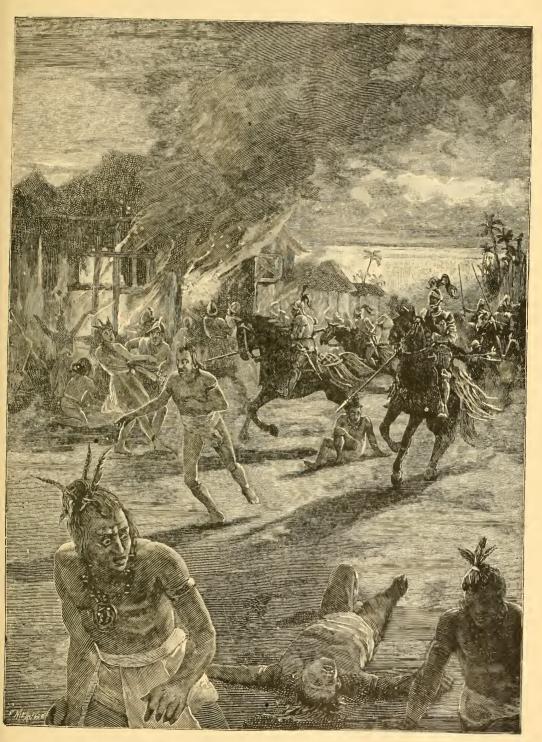
that the authority of Spain was fully restored, and that the patriot cause was hopeless.

The revolution of 1820 in Spain revived the enthusiasm of the national party in Mexico, and a new leader appeared. This was Don Augustin Iturbide, a native Mexican, who had distinguished himself in the civil war as an officer in the royalist service. the 24th of February, 1821, he issued a proclamation declaring Mexico independent of Spain, and calling upon the Mexicans to sustain him. The revolt was successful. The whole country acknowledged his authority, the royal government was overthrown, and on the 27th of September the city of Mexico was surrendered to him by the viceroy.

A New Emperor.

A regency was established, and on 19th of May, 1822, Iturbide was proclaimed Emperor of Mexico by the army. This act gave great offence to the other patriot leaders, and on the 2d of December, Santa Anna, with the support of Bravo, Guerrero, and others, proclaimed the republic at Vera Cruz. A civil war was averted by the abdication of Iturbide on the 19th of March, 1823. A national congress was at once convened. Iturbide was condemned to exile, and sailed for England in May, 1823.

A provisional government was set up, and on the 4th of October, 1824, the Congress adopted a constitution modeled upon that of the United States. By virtue of this instrument Mexico became a republic consisting of nineteen States and five territories. General Vic-



SLAUGHTER OF THE MEXICANS BY THE SPANIARDS.

toria, one of the popular leaders, was chosen president. Iturbide now returned to attempt the recovery of his throne, but was made prisoner, and was shot on the 19th of July, 1824.

President Overthrown.

In 1828 the election of General Pedraza to the presidency over General Guerrero led to a revolt on the part of the followers of the latter. The outbreak was successful. Pedraza was overthrown and driven from the country, and Guerrero assumed the presidency on the 1st of April, 1829. In the same year the United States recognized Mexico as an independent republic. In July, 1829, a Spanish force landed near Tampico to attempt the restoration of the rule of Spain. It was compelled to surrender on the 11th of September. The troops were disarmed and sent to Havana.

Mexico, though independent, was not destined to enjoy the blessing of a stable government. Soon after the surrender of the Spaniards, the vice-president, General Bustamante, pronounced against Guerrero, deposed him, and was himself elected president January 11, 1830. He was succeeded by Pedraza, who three months later, was deposed by Santa Anna, who became president April 1, 1833. Bustamante and several leading men were exiled by the new president. Congress now enacted a law abolishing the compulsory payment of tithes, and it was proposed to confiscate the property of the church and apply it to the payment of the national debt.

These measures led to several out² breaks, the result of which was the repeal, in 1835, of the constitution of 1824, and the change from a confedera-

tion of states into a consolidated republic, with Santa Anna at its head as dictator, though retaining the title of president.

Texas, then a state of the republic, refused to accept this change, and proclaimed its independence. Santa Anna marched against the Texans in 1836, but after gaining some success, was defeated and made prisoner in the battle of San Jacinto, April 21, 1836.

The captivity of Santa Anna brought back the reign of anarchy in Mexico. Bustamante returned from exile, and on the 19th of April, 1837, became president. Later in the year Santa Anna returned to Mexico, and the real power passed into his hands. In March, 1839, a new revolution broke out, and Santa Anna once more became president. In July he was overthrown by General Nicolas Bravo, who held the office for one week.

Disorder and Violence.

A period of confusion followed; the constitution was suspended; and a dictatorship, consisting of Santa Anna, Bravo and Canalizo, was set up. In June, 1843, a new constitution was proclaimed, and Santa Anna became constitutional president in 1844. A few months later he was driven from power by a revolution, and on the 20th of September, 1844, Canalizo became president, only to be himself deposed in the following December by General Herrera, who was deposed by a new revolution on the 30th of December, 1845, which made General Paredes president.

During Herrera's administration Mexico became involved in a quarrel with the United States, growing out of the annexation of Texas by the latter power.

The details of this war have been related in "Great Events of American History," in another part of this volume, to which the reader is referred. During the struggle Santa Anna returned from exile, overthrew Paredes, made himself president, and took personal command of the army. The war resulted in the triumph of the American forces, and by the treaty of Guadaloupe Hidalgo, signed in February, 1848, California and New Mexico were ceded to the United States.

Repeated Revolutions.

The result of the war was fatal to Santa Anna. He was overthrown, driven from the country, and was succeeded by Herrera. A series of revolutions followed the war, elevating first one leader and then another to the presidency. On the 11th of May, 1861, Benito Juarez captured the city of Mexico, and his authority was generally recognized throughout the republic. He was one of the best of the Mexican presidents, and inaugurated a series of useful reforms which rendered his administration very popular with the mass of the nation.

Marriage was made a civil contract, perpetual monastic vows and ecclesiastical courts were abolished, and the church property, which was estimated at nearly one-half the real estate of the country, was appropriated to the service of the state. A little later the union between church and state, which had existed from the time of the conquest, was completely severed.

These measures, though popular with the people, gave great offence to the church party, which determined to destroy the Juarez government at any cost. At this juncture Spain, France and England, presented to the Mexican government a series of claims for losses sustained by their citizens in that country, and failing to obtain any satisfaction from the Juarez government, despatched a joint expedition to Mexico to enforce their demands. Early in December, 1861, a Spanish force under General Prim occupied Vera Cruz, and in January, 1862, the English and French forces arrived.

The Juarez government now proceeded to settle the difficulty by negotiation, and agreed that the English and Spanish claims should be paid by turning over to them a certain proportion of the customs receipts. This arrangement being satisfactory to England and Spain, their forces evacuated Mexico in May, 1862.

Plotting with the French.

The church party had seen in the presence of the foreign troops in Mexico an opportunity for the destruction of the Juarez government, and now resolved to put their plan in execution, although they knew it involved the loss of their country's liberties. They began to plot with the French, whose claim was the smallest, and induced the French emperor to attempt the erection of a monarchy in Mexico, which should make that country in actual fact a dependency of France, promising their active aid in overcoming the resistance of their countrymen.

Accordingly the French commander refused to accept the arrangement which had proved satisfactory to England and Spain, and on the 16th of April, 1862, France declared war against Mexico. The French army was reinforced, and the advance into the interior was begun. Puebla was attacked, but the French

were defeated and forced back to the coast. In 1863 the French army was strongly reinforced, and siege was laid to Puebla, which surrendered to General Forey on the 17th of May, after a gallant defence of three months.

A number of other successes were won by the French, and on the 10th of

that Mexico should be a hereditary monarchy under an emperor of the Roman Catholic faith.

The crown was offered to the Austrian Archduke Maximilian, and was accepted by him. He waived all claim to the throne of Austria in the event of the death of his brother, the Emperor Fran-June, 1863, they entered the city of cis Joseph, and made farewell visits to



ENTRY OF THE FRENCH INTO THE CITY OF MEXICO.

Mexico in triumph. Juarez and his government withdrew to San Luis Potosi.

The French and the church party at once proceeded to carry out their scheme. A regency was established on the 24th of June, and on the 8th of July an assembly of notables was held to decide upon the future form of government for Mexico. On the 10th this body declared the sovereigns of France, England and Belgium, and to the Pope, who gave him his special blessing. He sailed for Mexico in April, 1864, and on the 28th of May landed at Vera Cruz, which was held by the French.

After a short delay there he proceeded to the capital, welcomed all along the route with great enthusiasm by the church party. He made his formal entry

into the city of Mexico on the 12th of June, 1864. One of the first acts of Maximilian, who was childless, was to adopt as his heir the son of the Emperor Iturbide. He addressed himself with energy to the task of giving to Mexico a good government, and it is exceedingly probable that had he been able to establish his throne he would have done more for the country than any of its former rulers had accomplished; but from the first he had to encounter the hostility of the republican or national party, and his failure to restore the sequestered estates of the clergy and to revive the old connection between church and state, soon lost him the support of his only partisans; and he was kept on his throne only by the presence of the French army.

The imperial troops drove Juarez and his adherents back by degrees, and in September, 1865, he reached El Paso, on the Texan frontier. His forces maintained a determined resistance, and early in 1866 the tide began to turn in their favor. On the 25th of March they captured Chihuahua.

Protest by Our Government.

In the meantime the United States, appreciating the designs of France, had strongly protested against the establishment of the Mexican empire. At length, the Civil War being ended, the American government determined to give Juarez material aid unless France should withdraw her troops and leave the Mexicans to settle their own affairs. The French government was informed of this determination, and at last agreed to withdraw its army. Upon reaching this decision, the Emperor Napoleon sent General Castelnau to the city of Mexico to urge

Maximilian to abdicate, as he could not possibly succeed in holding his throne without the aid of France.

Maximilian refused to entertain the idea of abdication, and declined to see the French envoy. His ministers supported him in his determination. The withdrawal of the French army was immediately begun, and the emperor soon found himself dependent entirely upon the support of a few partisans whose desperate fortunes were so bound up with his own that they could not afford to desert him. The last French detachment was withdrawn from Mexico on the 16th of March, 1867.

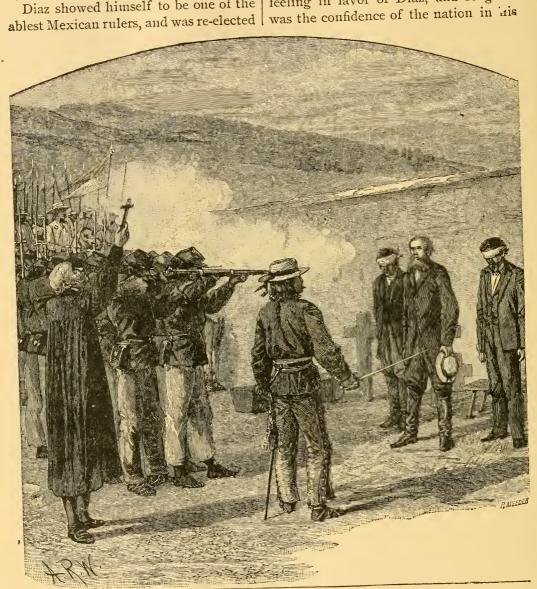
Shouts for the Republic.

The departure of the French was followed by a strong reaction in favor of the republic. The forces of Juarez were largely augmented, and the emperor, thrown upon his own resources, deemed it best to leave the city of Mexico, march northward, and offer battle to the republican army. He reached Queratero at the head of 5,000 men, and was at once besieged in that place by a force of 20,000 men under General Escobedo. The place was betrayed by the imperialist governor of the city, Maximilian was made prisoner, and shot on the 19th of June, 1867.

On the 16th of July Juarez returned to the city of Mexico, and began the work of reconstructing the government. The constitution was re-established, and in 1871 Juarez was again elected president. He died on the 18th of July, 1872, and was succeeded by the Chief Justice, Lerdo de Tejada, who was formally elected president on the 21st of November, 1872. He was re-elected in 1876, but was soon after overthrown by

fly to the United States.

General Porfirio Diaz and compelled to | relations with foreign powers being So strong was the popular peaceful. Diaz showed himself to be one of the | feeling in favor of Diaz, and so great



EMPEROR MAXIMILIAN SHOT BY MEXICAN TROOPS.

in 1884, and again in 1888; and under him the position of the republic, with regard both to security and development of its resources, steadily improved, and comparative tranquillity prevailed, the rebellion broke out in 1892. General

wisdom and patriotism, that he was reelected in 1892, and again in 1896.

An insurrection that threatened to plunge the country into anarchy and Lorenzo Garcia was killed by his troops | Texas. The band was, however, diswho joined the rebels under Garza in | persed and order restored.

SOUTH AMERICA IN THE NINETEENTH CENTURY.

Portugal, and sent an army into that country. The regent (afterwards Joam VI.) and the royal family and court at once embarked upon the fleet and sailed for Rio de Janeiro. This was a great gain for Brazil, and was followed by important changes in the government; the ports were thrown open to all the world, and trade was invited from all nations. In 1815, upon the overthrow of Napoleon, Brazil was erected into a kingdom, and when Joam VI. came to the throne in 1816 he took the title of King of Portugal, Algarve and Brazil.

He continued to reside in Brazil, and so offended his Portuguese subjects. In September, 1820, as we have related elsewhere, a revolution broke out in Portugal, and the Spanish constitution was proclaimed. Revolutionary disturbances occurred in Para and Pernambuco, and the king, fearing that the movement would involve the whole of Brazil, placed himself at the head of it, and on the 26th of February, 1821, proclaimed the constitution of Brazil. Soon after this he returned to Portugal, leaving his son, Prince Pedro, as Regent of Brazil. He had scarcely sailed when a revolutionary movement broke out, in April, 1821. Brazil was declared an independent empire on the 12th of October, 1822, and on the 1st of December, 1822, the regent was crowned Emperor as Dom Pedro I. A constitution was adopted in 1824, and on the 7th of September, 1825, Portugal acknowledged the independence of Brazil.

In 1826 Joan VI. died, and Dom Pedro became King of Portugal. He preferred to retain his western empire, and resigned the Portuguese crown to his infant daughter Doña Maria da Gloria. In the same year a war broke out between Brazil and the Argentine republic, which was seeking to absorb Uruguay. Peace was made through the mediation of Eugland, and Montevideo or Uruguay was constituted an independent republic.

On the 7th of April, 1831, Pedro I., who had been engaged in a long dispute with the chamber of deputies, ended the quarrel by abdicating his crown in favor of his son, Pedro II., the present emperor. As the new sovereign was but six years old, a council of regency administered the government until 1841, when Pedro was declared of age, and was crowned on the 18th of Tuly.

The reign of Pedro II. was prosperous and highly beneficial to his country He proved a liberal and able ruler, and spared no pains to advance the civilization and prosperity of Brazil. In 1831 a law placing severe restrictions upon the slave trade was enacted, and in 1850 the traffic was finally abolished. In 1852 Brazil, in alliance with Uruguay and the forces of Entre Rios, waged a successfu. war against the Argentine Dictator Rosas, who was defeated and forced to fly to England. In 1895 Brazil, Uruguay and the Argentine republic declared war against Paraguay, the cause being the unprovoked aggressions of Lopez, the Dictator of Paraguay, upon the allied states.

The war was long and costly, and ended only with the death of Lopez, on the 1st of March, 1871. Brazil entered into a separate treaty with Paraguay concerning boundaries and a war indemnity, without consulting her allies. gave great offence to the Argentine republic, and came near leading to a war with that country. The difficulty was settled in October, 1872, by an agreement that the Argentine republic should negotiate separately with Paraguay, as Brazil had done. In 1871 a law was enacted by the Brazilian chambers providing for the gradual extinction of slavery throughout the empire.

Dom Pedro was deposed in November, 1889, and took refuge in Europe. Fonseca was made president of the national congress. Soon there were serious disagreements between him and the congress, and he attempted in 1891 to assume the dictatorship. The revolution-

ary spirit again showed itself and in November Fonseca resigned.

Then followed a period of constant intrigues, ambitious schemes to rule the country, and a succession of revolts and insurrections that prevented anything like a stable government. On the 15th of November, 1894, Dr. Prudente Jose de Moraes assumed the office of president, and as one of his first political acts granted annesty to those who had been leaders in seditions plots. The clemency of the government, however, did not entirely suppress the spirit of revolt, and the republic continued in a state of turnoil and insecurity.

Attempts were made in November, 1897, to assassinate the president, and martial law was proclaimed. In March, 1898, Dr. Campos Salles was elected president, but so many factions and conflicting interests divided the populace that hearty and united support of the government was not assured.

HISTORY OF PERU.

TN 1820 the South American States rose in rebellion against Spain, and proclaimed themselves independent. Peru was the last to take this step. General San Martin, who had freed Chili of the Spaniards, entered Peru at the head of an army of Chilians and Buenos Ayreans, seized the city of Lima, and drove the Spaniards into the interior. On the 28th of July, 1821, Peru declared herself independent of Spain, and General San Martin was proclaimed protector of the republic. Becoming unpopular, he resigned on the 19th of August, 1822, and in February, 1824, General Bolivar was made dictator.

On the 9th of December, 1824, the Peruvians inflicted a decisive defeat upon the Spaniards in the battle of Ayacucho, and in January, 1826, expelled them from Callao, their last foothold in Peru. In 1825 Bolivar resigned the dictatorship, but before doing so, organized the southern and southeastern provinces into a separate republic, which took the name of Bolivia.

Although independent, Peru was not tranquil. In 1826 a revolution occurred, and the constitution proclaimed by Bolivar was destroyed, and a new one adopted. In 1836 President Santa Cruz, of Bolivia, entered Peru with an army, and proclaimed himself Supreme Pro-

tector of the Bolivio-Pernyian confederation. The union between the two States lasted until 1839. A series of depositions and civil wars now ensued, but were brought to an end in 1844 by General Castillo, who made Menendez president.

Castillo was elected as the successor of Menendez, and entered upon his office on the 1st of April, 1845. He remained in power until 1851, and gave to Peru the best government it had ever known. He was succeeded by General Echenique, who was accused of gross frauds in his administration. Castillo headed an insurrection, drove Echenique from power and once more became master of Peru. Several determined efforts to overthrow Castillo's government were made, but all failed, and he succeeded in holding office until the expiration of his term. In 1855 he declared slavery abolished in Peru. In October, 1862, General San Ramon succeeded Castillo as president, but died in the following April. General Pezet succeeded him. During Pezet's administration the Spaniards seized the Chincha islands, and Peru declared war against Spain.

Peace was made in 1865, Spain restoring the islands, and Peru agreeing to pay a war indemnity of \$3,000,000. This treaty was denounced by the people, and brought on a revolution which overthrew Pezet, and made General Prado dictator. He concluded an alliance with Chili in December, 1865, and in January, 1866, the two States declared war against Spain. On the 2d of May the Spanish fleet sustained a defeat at the hands of the allies, and a few days later withdrew from the Pernyian waters. On the 10th of January, 1868, a successful revolution compelled Prado to resign his office and retire to Chili.

On the 28th of July Colonel Balto was proclaimed president, but was assassinated in July, 1872. Peace was restored in a few weeks, and on the 2d of August Don Manuel Pardo was almost unanimously chosen president. He held office until the 2d of August, 1876, and his administration was highly popular and successful. At length internal dissensions arose, a sanguinary revolution broke out at Lima, December 23d, 1881, and Pierolas was proclaimed dictator. Soon after this the Chilians occupied the town, vacating it October 23d, 1883. Insurrections and civil disorders prevailed until 1885, resulting in the retirement of Iglesias and Caceres, rival presidents, through foreign intervention. Caceres was elected president April 23d, 1886.

Berinudez was elected president in 1890, and a revolutionary attempt near Lima to overthrow him was defeated. Bermudez died in March, 1894, and in August of the same year Caceres was again inaugurated president. The country remained in an unsettled state and was disturbed by repeated revolts and uprisings, and chronic turmoil.

HISTORY OF CHILI.

HE Spaniards organized Chili as a | governed and the people were grossly

vice-royalty, and divided it into oppressed. In July, 1810, the popular thirteen districts. Like all the discontent broke out into revolution; Spanish provinces, it was always mis- the Spanish Governor Carrasco was

deposed, and the government placed in the hands of a "junta." An outward loyalty to Spain was maintained, but it was the real design of the leaders of the movement to break off all connection with the mother country. In April, 1811, the royal troops were attacked by the patriots and driven from Santiago. General Carrera was appointed by the "junta" supreme president of the national congress and commander-in-chief of the army. In 1813 he won two victories over the Spanish troops, but the latter were largely reinforced, and before the close of the year Chili was compelled to submit once more to the authority of Spain.

Spanish Tyranny.

During the next three years the cyranny of the Spanish officials was more odious than it had been before the outbreak. The patriots now raised an army in the neighboring province of La Plata, and made General San Martin its commander. He marched into Chili, and won an important victory over the royalist forces at Chacabuco on the 12th of February, 1817. A provisional government was set up by the patriots, and Don Bernardo O'Higgins was placed at its head as supreme dictator. The Spaniards now rallied and defeated the Chilians with heavy loss at Chaucharayada, but were themselves utterly routed by the patriots at Chilenos on the 5th of April, 1818. Not more than 500 Spaniards escaped from the field.

This victory entirely destroyed the Spanish power in Chili, Peru and Buenos Ayres, and secured the independence of those states. The Spaniards retreated to the port of Valdivia, which

they held until 1820, when they surrendered to the Chilian forces.

The dictatorship of General O'Higgins lasted until 1823, when, having become unpopular, he was forced to resign his power. A provisional government of three succeeded him, but gave way in the course of a few weeks to General Freire as dictator. In 1828 the first Chilian constitution was adopted. It was revised in 1831–33.

A Revolt Suppressed.

Chili has been the most orderly of the South American republics, but has not entirely escaped revolution. The most serious of these outbreaks occurred in 1851; one in April and the other in September. The latter was the more formidable of the two, but both were at length suppressed. The September revolt was caused by the effort of General De la Cruz to overthrow the president of the republic, Don Manuel Montt. It cost the government a sacrifice of 4,000 soldiers for its suppression, and greatly injured the prosperity of the country. At its close a general anniesty was proclaimed to the insurgents, and President Montt applied himself with energy to the restoration of the prosperity of the country.

He was re-elected in 1856. His administration was the ablest in the history of the republic. It gave to the country a well-arranged code of laws, established a tribunal of commerce and a bank of discount and deposit at Valparaiso, arranged the finances on a securer basis, and negotiated treaties of commerce and friendship with France, Sardinia, the United States and Great Britain. In 1862 the Arancanians gave great trouble to the government. Under

the leadership of a Frenchman named De Tonniens, they endeavored to throw off the authority of Chili and make themselves independent. They were compelled to submit.

Coast Blockaded.

When the war broke out between Peru and Spain, in 1864, Chili warmly sympathized with her sister republic. This sympathy drew upon her the hostility of Spain, and the next year the coast of Chili was blockaded by the Spanish fleet. Chili, late in 1865, declared war against Spain. On the 26th of November the Chilian steamer Esmeralda captured the Spanish steamer Covadonga, with all the correspondence of the Spanish admiral on board. This event so mortified Admiral Pareja that he committed suicide. He was succeeded by Admiral Nuñez. On the 14th of January, 1866, Chili entered into an alliance with Peru, and on the 7th of February the allied fleets defeated a Spanish squadron.

On the 31st of March Admiral Nunez, regardless of the protests of all the foreign representatives at that port, bombarded the city of Valparaiso, destroying property to the amount of more than ten millions of dollars, and demol. ishing nearly all the public buildings and many private edifices. Not a shot was returned from the town. greater part of the loss fell upon the foreign residents. In the following month the Spanish fleet took its departure from the Chilian waters. United States now offered their mediation between Spain and the allies, and on the 11th of April, 1871, a treaty arranging an armistice and an indefinite truce was signed at Washington.

In 1869 the Araucanians again endeavored to throw off the Chilian rule, but in the following year were put down, and their country was permanently occupied by the Chilian forces. From this time the history of Chili was comparatively uneventful until 1891, when a revolution occurred, resulting in a victory for the insurgent forces. In the decisive battle 300 of President Balmaceda's forces were defeated with heavy loss. An attempt was made at Valparaiso on May 7th to assassinate the leading members of the cabinet.

Chilian Steamer Seized.

On the 5th of May the insurgent Chilian steamer Itata was seized by United States officers at San Diego, California; she escaped, and arriving at Iquique, June 4th, was delivered to the American warships. The suicide of Balmaceda followed his downfall, and a provisional Junta was formed. The crew of the United States steamer Baltimore having met with outrageous treatment by the police of Valparaiso, our government promptly demanded an apology from Chili. The trouble was at length amicably settled.

On January 3, 1892, the Chilian rioters were sentenced (some to imprisonment and some to penal servitude), for assaulting the sailors of the Baltimore, and the President of Chili apologized to the United States government. In August, 1894, an arbitration commission at Washington awarded our government \$240,564 for claims against Chili. Erraguriz was elected president in July, 1896. In July, 1897, boundary disputes will Argentina were referred to the arbitration of Queen Victoria.

UNITED STATES OF COLOMBIA.

PANISH rule here, as elsewhere, bore very hard upon the people, and finally resulted in revolution. first outbreak was made in 1781, and was suppressed. It was followed by another unsuccessful attempt in 1795. The authority of Spain was not contested again until 1811, when the people rose in rebellion and drove out the Spanish forces. The victories of Bolivar established the independence of New Granada, and in 1819 the state became a member of the republic of Colombia. This confederation was broken up by the withdrawal of Venezuela in 1829 and Ecuador in 1830. In 1831 New Granada declared itself an independent republic, and in 1832 adopted a constitution. The chief executive power was confided to a president, who was to be elected for a term of four vears. From this time until 1860 the history of the republic was mainly peaceful and uneventful.

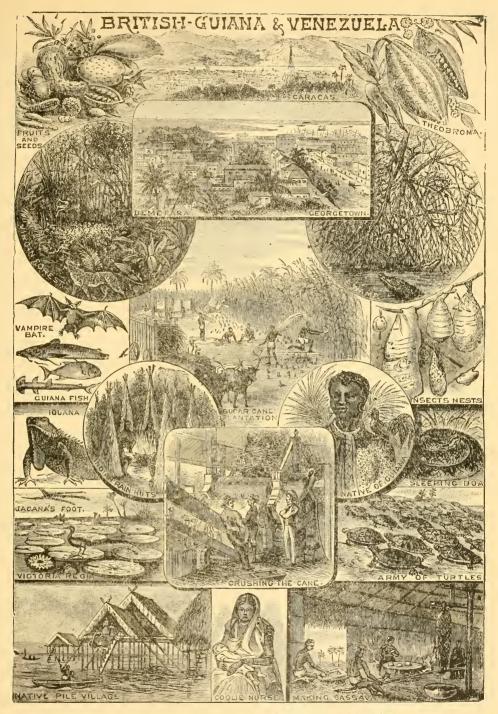
Early in 1860 a revolution broke out, headed by General Mosquera, the chief of the liberal party. President Ospina was overthrown, and Mosquera seized the government. A convention was held at Bogota in 1861, and a new republic was organized under the name of the United States of Colombia; a constitution was adopted, and Mosquera was made dictator. The civil war was brought to an end in December, 1862, by the submission of the conservative party to the new republic. A national congress then met at Rio Negro on the 4th of February, 1863, and Mosquera resigned his dictatorial powers to this body.

A new constitution was promulgated on the 8th of May, 1863, and subsequently Mosquera was appointed provisional president, to hold office till April 1, 1864, when he was to be succeeded by a president elected by the people. The new constitution contained provisions confiscating the property of the church, and establishing religious liberty. These provisions aroused the hostility of the priests and their followers, who, headed by the Archbishop of Bogota, threw every obstacle in the way of the government.

These disputes led to an attempt on the part of Mosquera, who had again been chosen president in 1866, to seize the whole power of the government. He was defeated and condemned to two years of exile. The principles of religious liberty and immunity from imprisonment for debt remained undisturbed. In 1875 an outbreak in some of the Atlantic states occurred, but was put down. In 1876 an unsuccessful revolution was begun by the clerical party, but was suppressed in the following year.

In 1886 a fresh constitution waadopted, based on that of the United States, placing the central authority in the strengthened hands of the federal government. An insurrection broke out in 1885, the government troops were defeated, and peace was restored Since then the history of the country has been uneventful.

Venezuela remained under Spanish rule until the early part of the present century. It warmly opposed the accession of Joseph Bonaparte to the Spanish throne; and on the 5th of July, 1811,



SCENES IN BRITISH GUIANA AND VENEZUELA

threw off its allegiance to Spain, and declared itself independent. In 1812 the treaty of Victoria restored it to Spain. The Spanish tule was hateful to the people, and in 1813 Venezuela again revolted under the leadership of General Simon Bolivar. A long struggle ensued, and in 1819 the independence of the country was practically secured, and the republic of Colombia, consisting of New Granada, Venezuela, and Ecuador, was established. with Spain did not close until 1823, but the result was assured from the time of the formation of the republic. In 1821 a constitution was adopted. In 1820 Venezuela withdrew from the Colombian republic, and became an independent state. In 1830 Ecuador became a separate republic. The dissolution of the old confederation was peaceful and amicable. For the next fifteen years the history of Venezuela is peaceful and uneventful. In 1846 General Monagas became president. A period of constant civil war now set in, and lasted until June, 1863, when the accession of General Falcon to the presidency restored tranquillity to the country. Several years of peace followed, and then a new revolution proke out and resulted in the establishment of a provisional government under Guzman Blanco, in April, 1869. The next year he convened a congress at Valencia, and compelled that body to appoint

him provisional president of the republic, with extraordinary powers. In February, 1873, he was elected by the people for a term of four years.

There has never been any agreement between Great Britain and Venezuela as to the boundary line between the latter country and British Guiana. The Venezuelan Government represented to ours at Washington that Great Britain was disposed to make encroachments and claim territory that did not by right belong to her.

In December, 1895, President Cleveland sent a strong message to Congress on this subject, in which he took occasion to assert in very plain terms the Monroe Doctrine. The message was received with great favor, and a commission of investigation was appointed by Congress. For a time there was loud talk of war between Great Britain and the United States, but wiser counsels prevailed, and Great Britain furnished the commission with all the information in its possession, which could be of service in reaching a just and equitable conclusion.

In 1899 a commission to determine the boundary line between Venezuela and British Guiana assembled in Paris. Ex-President Harrison was counsel for the Republic of Venezuela, and the commission reached an agreement which was recommended to the two governments.

BRITISH GUIANA.

XCEPT for two short periods the settlements composing British Guiana were held by the Dutch down to 1803, when they were taken possession of by the English.

One of them, Berbice, was at first administered as a distinct colony, but in 1831 it was incorporated with the rest of British Guiana.

During slave-holding time sugar-

planting brought some degree of prosperity to these colonies; but their productiveness in this respect was very sensibly crippled by the abolition of slavery, which deprived them of their supplies of the requisite kind of labor for the plantations. Since that event coffee and cotton have almost entirely ceased to be grown; and the cultivation of beet-root for sugar caused a

very serious crisis in Guiana caneplanting.

British and Dutch Guiana, however, still shows signs of vitality. The canesugar industry, if not reviving, is at least not retrograding, whilst gold-mining is a decidedly progressive industry. Except for gold-mining, which, however, remains stationary, French Guiana is in a hopelessly deplorable condition.

HISTORY OF BOLIVIA.

FTER the revolution of 1820 it became independent of Spain. In 1825 it was erected into an independent republic by General Simon Bolivar, and was named Bolivia in honor of him. A national convention was assembled, and General Bolivar was requested to prepare a constitution. General Sucre was chosen president, and continued in office until 1828, when he was overthrown and expelled from Bolivia by General Gamarra. Shortly after this he was assassinated. Sucre was succeeded by General Blanco, who, a few months later, was overthrown and slain in a revolution healed by General Balibian.

In 1829 Mariscal Santa Cruz was elected president. He held office until February, 1839. In 1836 he became the head of the state in Peru, styling himself the Supreme Protector of the Bolivio-Peruvian confederation. This union between the two states was broken in 1839 by the overthrow of Santa Cruz by a new revolution. A period of confusion and civil war followed in Bolivia.

In 1858 Dr. Linares became president, and ruled with dictatorial power. He was overthrown in 1861, and Acha was named provisional president. In De-

cember, 1864, General Melgarejo headed a new revolution, and in February, 1865, defeated the government forces and became president. General Belzu attempted to overturn him, but was defeated and killed. Another revolt was put down in January, 1866.

In that year Bolivia joined the alliance of Peru, Ecuador and Chili against Spain. In March, 1867, a large district in the northern part of the republic was added to Brazil. In December a formidable revolution, having for its object the restoration of Acha to the presidency, broke out. It was out down early in 1868. In February, 1869, Melgarejo, with the unanimous consent of the national congress, declared himself dictator. In May he restored the constitution, but continued to exercise his dictatorial powers. In October a new revolution broke out under the leadership of A. Morales. The outbreak was put down, but was renewed in July, 1870, only to be stamped out again. In 1871 a successful revolution drove Melgarejo out of the country, and Morales became president, for one year. In November Melgarejo was assassinated in Lima, by his son-in-law.

Morales survived him a little more

than a year, and was murdered by his son-in-law on the 27th of November, 1872. In May, 1873, Don Adolfo Ballivian became president of the republic. Ill health soon compelled him to withdraw from public life, and Dr. Tomàs Frias was appointed to succeed him, in February, 1874. On the 14th of the same month General Ballivian died. His death was followed by a series of revolutionary disturbances, which were not finally crushed until April, 1875.

Bolivia is naturally one of the richest countries of South America, but its great mountain chains cut it off from all communication with the sea or the rest of the continent on the western side, except by the tedious and expensive process of mule transport across the mountains. On the eastern side this obstacle to the progress of the republic does not exist. The Madeira river drains a large portion of the republic, receives the waters of the greater number of its streams, and finally empties into the Amazon. For about 150 miles it is obstructed by rapids. Below the rapids

it is navigable to the Amazon, which river gives ready access to the sea.

In 1872 it was resolved to build a railway around these rapids, and to bring Bolivia into direct communication with the rest of the world. In 1876 Bolivia joined Peru in a war against Chili. In 1879 Bolivia was swept by a revolution; Diaz, at that time president, was deposed and compelled to flee, and Campero was elected to be his successor. Peace was established with Chili, and the conditions were finally settled in December, 1883. In August, 1888, Aniceto Arce, president, suppressed a revolution and restored peace.

In 1892 an insurrection by General Camacho was suppressed and Baptista was declared president. An ultimatum was addressed to Peru demanding satisfaction within twenty-four hours for invasion of territory. The Bolivian Minister was recalled, and finally the dispute was referred to arbitration. On the 20th of August, 1896, Alonso assumed the presidency.

ARGENTINE REPUBLIC.

Ayres was created. It embraced the countries now known as the Argentine republic, Bolivia, Uruguay, and Paraguay. In 1806, Spain being at war with Great Britain, a small British force captured Buenos Ayres and Montevideo, but was soon driven out by the inhabitants. Another effort was made by a stronger British force to capture Buenos Ayres in 1807, but was repulsed.

In 1810 Buenos Ayres threw off the Spanish yoke, and proclaimed its inde-

pendence. The war was decided in 1812 by the surrender of the Spanish forces at Montevideo. In January, 1813, a "sovereign assembly" was convened at Tucuman, then the capital of Buenos Ayres, and the administration of the government was confided to it. The independence of the republic being established, an army was sent into Chili, under General San Martin, and aided the Chilians in driving the Spaniards from that province. Peru next assisted, and the independence of that country was secured in 1821.

In 1816 the new republic took the name of "The United Provinces of La Plata," and in 1817 General Puyerredon was made supreme dictator. Somewhat later the city of Buenos Ayres was made the capital of the republic. In 1820 the dictatorship was abolished, and a democratic form of government was instituted, with General Rodigruez at its head.

Peace was made with Brazil in 1828, through the mediation of England, and the independence of the republic of Uruguay was recognized by La Plata. In 1831 the Argentine republic was formed by the confederation of the provinces of Buenos Ayres, Corrientes, Entre-Rios, and Santa Fé. A little later some of the other provinces joined the union. This was followed by efforts of some of the leading officers of the army to overthrow the republic and seize the supreme power.

Made Dictator.

This unsettled state of affairs continued until 1835, when Rosas, who had been chosen president in 1833, was made dictator. He held office until 1852, and during this period governed the republic with firmness and sternness. He made repeated efforts to force Paraguay and Uruguay to join the Argentine confederation. These efforts involved him in a quarrel with Brazil, which was also seeking to get possession of Uruguay.

In September, 1852, a revolution broke out in the province of Buenos Ayres, which withdrew from the confederation and established a government of its own. This act led to repeated quarrels and conflicts between the Argentine confederation and Buenos Ayres. On the 17th of December, 1871, the

Argentine troops were defeated by the forces of Buenos Ayres under General Mitre. The Argentine confederation was now remodeled, with Buenos Ayres as the leading state. The city of Buenos Ayres was made the capital of the republic, a constitution was adopted, and General Mitre was chosen president, In 1865 the Argentine republic declared war against Paraguay, and entered into an offensive and defensive alliance with Brazil and Uruguay. The struggle resulted in the utter overthrow of Paraguay, the aggressions of which state provoked the war in the year 1870.

Numerous Outbreaks.

The alliance of the Argentine confederation with Brazil and Uruguay gave great offence to certain parties in the republic, and led to several outbreaks. These were suppressed. The peace of 1870 was followed by a formidable rebellion in Entre-Rios, which lasted a year, and was put down only at the cost of an immense number of lives. The revolt was renewed in 1873, but was suppressed in the course of a few months.

In 1874 the contest over the presidential election plunged the country into a new civil war, which lasted several months and caused much suffering. It was settled by the acknowledgment of the president elected by the people. On June 13th, 1886, Juarez Celman was elected president. Since then the great material progress of the country has been accompanied by an equally remarkable movement in favor of stability of government. The policy of the government toward agricultural immigrants is highly liberal.

CHAPTER XVI.

Asia and Africa in the Nineteenth Century.

a large share of public attention during the century, and both have undergone important changes. This is all the more remarkable from the fact that they have remained in a stereotyped state for ages, and gave no signs of progress until within a comparatively recent period.

Towards the end of the seventeenth century the Chinese government, while refusing to Great Britain, as a European power, permission to trade with the empire, granted that privilege to the British East India Company. This company conducted the trade with China until 1834, when its charter expired. The British government then sent Lord Napier to superintend the trade with China, but he was refused permission to communicate with the imperial viceroy at Canton on terms of equality. He endeavored to force his way to Canton with two frigates, but after a spirited engagement with the forts at the Bogue, September 11th, 1834, withdrew to Macao, where he died about a mouth later. After this the trade between the British merchants and the Chinese was carried on for several years without the superintendence of the British officials. One of the principal articles of this traffic was opium, of which large quantities were sold yearly in China by British merchants.

The imperial government at first tolerated this trade, but, at length, becoming alarmed by the fearful evils which the use of opium was fastening upon the people of China, endeavored to put a stop to it. In the autumn of 1837 Captain Elliot, the English representative at Canton, was ordered by an imperial decree to send away the opium ships and discontinue the trade in that article. This command was disregarded and the trade went on. In the early part of 1839 the imperial Viceroy Lin, acting under the orders of his government, seized and destroyed all the opium on hand at Canton, to the value of \$10,-000,000. An illicit trade in opium at once sprang up, and was resented by the Chinese Government, which declared all commercial relations with Greåt Britain at an end.

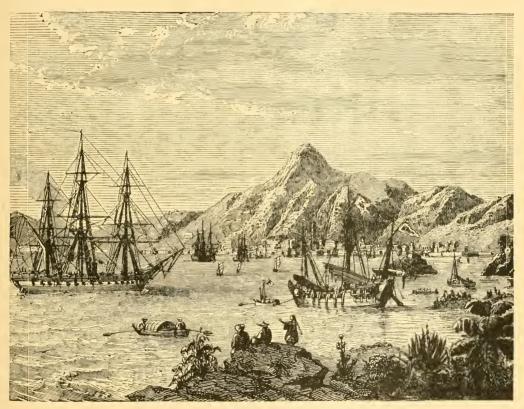
Famous Opium War.

This led to the opium war, which is the most prominent event of the century in the history of China. The result was that China was forced to surrender her exclusiveness, and enter into more intimate commercial relations with Europe. The war was brought to an end by the treaty of Nankin, in August, 1842. The island of Hong Kong was ceded to the British, and the ports of Canton, Amoy, Foochoo, Ningpo and Shanghai were thrown open to the trade of the world, and made the official residences of Enropean consuls. China was also compelled to pay to Great Britain an indemnity of \$21,000,000. In 1842 Caleb Cushing, who had been sent out by the United States to China, arrived in that country and readily negotiated a commercial treaty between the two countries, July 3, 1844. This was followed

by a treaty with France, signed October 23, 1844.

The Chinese government never meant to observe these treaties in good faith, and its treatment of the foreigners within its dominious was at all times marked by deceit and an ill-concealed hostility. This feeling led to constant disputes be-

France had experienced similar wrongs at the hands of the Chinese, and made common cause with England. The two powers now resolved to force China to a settlement, and in 1857 sent a joint expedition to that country. Canton was bombarded by the Anglo-French fleet on the 28th of December, and the next



VIEW OF VICTORIA-HONG KONG.

tween the imperial authorities and the day was occupied by the English and foreign consuls and merchants. In October, 1856, matters were brought to a crisis by the seizure of the Arrow, a British vessel built in China, by the Chinese officials. This act led to a desultory war between China and Great Britain, which lasted several years, and in which the Chinese were, as a rule, the winners.

French land forces, which numbered less than 6,000 men. The viceroy Yeh was captured, but the Chinese Government endeavored to offset this reverse by degrading Yeli and appointing his successor. Russia and the United States now joined England and France in endeavoring to force China to negotiate more liberal treaties with the western powers.

The action of the Chinese Government was unsatisfactory, and the allied forces attacked and captured the forts at the mouth of the Pei-ho, and pushed on to Tien-tsin, fifty miles above the mouth of the river. The Chinese Government now yielded, and entered into treaties with Great Britain, France, Russia and the United States, which stipulated for the residence of foreign ministers at Pekin, for the opening of several ports in addition to those named in the treaty of Naukin, for travel and trade under certain conditions in the whole empire, for the free navigation of the Yangste-kiang river, and the settlement of the transit-dues question. Great Britain was paid an indemnity of five and-a-half million dollars, and France a smaller sum.

British Navy Defeated.

China endeavored as usual to evade this treaty, and the imperial authorities exerted themselves by prescribing a most unusual route for them, and imposing various and vexatious delays upon them, to prevent the foreign ministers from reaching Pekin. The British minister thereupon ordered Admiral Hope to force the passage of the Pei-ho. That officer attempted to execute his orders, but was driven back with great loss by the forts at the mouth of the river. The British and French ministers then withdrew to Shanghai to await the instructions of their respective governments. The American minister, Mr. Ward, concluded to accept the Chinese programme, and submitting to many inconveniences and indignities, at length reached Pekin. He was denied an interview with the emperor, except upon conditions degrading to himself and his country, and returned in disgust to Shanghai, where he joined his European colleagues.

England and France resented the bad faith of China by renewing the war with that country. A joint expedition was sent against the Chinese capital. The Pei-torts were taken August 21st, 1860, and Tien-tsin was occupied August 24th. The Chinese officials endeavored to stay the progress of the allies by negotiation, but their design being understood, the Anglo-French forces pushed on, and on the 6th of October arrived before Pekin. The operations against the city were conducted with vigor; the emperor's "summer palace," a magnificent structure, was plundered and burned, and on the 13th of October one of the gates of the city was surrendered to the allies.

The imperial government was now forced to yield, and the treaties with France and England were renewed and ratified. The allies then withdrew to the coast. Since that time the policy of China has been to keep faith with the western powers.

Great Rebellion.

During all this time China had been torn by a rebellion of unusual magniture. This was the Taiping rebellion, which broke out in the southern provinces of the empire in 1850. At first the rebels were successful, and overran a large part of southern China. The war lasted until 1864, when the last body of rebels was dispersed and the imperial authority restored. In 1857 the Mohammedans of Yunnan rose in rebellion, and were for a time victorious. This revolt extended over a period of fifteen

years, but was suppressed in 1872. A second Mohammedan rebellion broke out in the north-western part of the empire in 1862. It was suppressed in 1873.

In 1871 China became involved in a quarrel with Russia, and was obliged to cede to that power the district of Kulja and the whole of the basin of the Ili, a

the various European powers and to the United States. At its head was Anson Burlingame, formerly minister from the United States to China. "It had its origin in the desire of the government to demonstrate to western powers its friendliness, and to forestall demands of an extreme character which it antici-



INTERIOR OF A CHINESE TEMPLE, SHOWING THEIR IDOLS.

region embracing an area of about 600,000 square miles, and containing a population of 2,000,000 people. In 1861 the Emperor Hieng-fun, who had succeeded the Emperor Tau-Kwang, in 1856, died, and his son T'oung-chê came to the throne. He was but five years old at the time. In 1873 he was declared of age and assumed the government.

In the autumn of 1867 an embassy was sent by the Chinese government to

pated would be made during the revision of the treaties of 1858 then about to take place. Its chief seized the opportunity to place before the world the indications of a marked change of policy on the part of the government, and to demonstrate that the old system of recourse to local authorities for the redress of grievances should be abandoned in favor of representation to the imperial authorities at Pekin. The facts of his

(Burlingame's) appointment to represent China, and of his being accredited to western states on terms of equality, afforded an indication of the marvelous change which had ensued since the war, and a more complete justification of the wisdom of the allies in insisting upon residence at the capital."

Cold-Blooded Massacre.

In 1870 the Chinese attacked the French consulate at Tien-tsin and massacred the consul, vice-consul, the interpreter of the French legation at Pekin and his wife, a Catholic priest, nine sisters of charity, and some others. Frence consulate, the cathedral and the missionary hospital were destroyed. The outbreak was severely punished by the Chinese government, and an apology was made to France.

In 1875 the Emperor Kwang-liu, the reigning sovereign (1878), succeeded to the throne. On the 30th of June, 1876, the first line of railway in China, from Shanghai to Woosung, a distance of eleven miles, was opened. It was built by an English company.

Several outbreaks occurred during 1801, and riotous demonstrations against missionaries and mission stations aroused the indignation of Christian nations. A combined protest against these persecutions were made to the Chinese government by the ministers of foreign countries resident in China. Thereupon the government greatly increased the severitiy of its measures against criminals who had been abusing foreigners, and determined to use all its power for the protection of the foreign residents of the empire. This had the intended effect.

and Japan. Japan claimed the right to protect her subjects in Corea. Corea. although an independent kingdom baving its own emperor, was to all intents and purposes a part of China, and all attempts on the part of Japan to extend her influence in Corea were strenuously resisted.

On the 30th of June, 1894, the King of Corea renounced all subjection to China, and called on the Japanese for help. The demands of Japan, for extensive reforms, and for the observance of a treaty made in 1885, were opposed by China, and hostilities immediately began. A British despatch boat, conveying Chinese troops, was attacked by Japanese warships, sunk off Asan, and many were killed. In July, the Japanese, under Gen. Oshima, gained important victories. In August, the Chinese made a formal declaration of war.

Great Battle of Yalu.

In September, the Chinese Emperor transmitted a circular to the great powers justifying the position of China in the pending struggle. A great naval battle at the mouth of Yalu river on September 17th resulted in terrible slaughter, and the destruction of eight Chinese vessels. This was the turning point of the conflict, and Japanese successes followed in quick succession both on land and sea. In short, the wonderful vigor and military prowess of Japan surprised the world, and, in the contest with China, she was completely successful.

On the 17th of April, 1895, a peace treaty was signed, which assured the independence of Corea, the retention by Japan of conquered places, and a heavy indemnity for the expenses of the war. In 1894 war broke out between China | But later, the ministers of Russia, Germany and France protested against the annexation of Chinese territory to the Japanese Empire, and Japan was cheated out of a large part of what her victories had gained.

Since this war with Japan the pro-

gress of events in China has been comparatively uneventful, the latest international transactions being concessions made to Russia and Great Britain, both of which powers are anxious to extend their dominions in the East.

JAPAN IN THE NINETEENTH CENTURY.

of utter seclusion from the rest of the world, and the vessels of forign nations were not allowed to enter ner ports. It is marvelous that an empire, so long isolated and dead to both hemispheres, should have been so completely transformed, showing as great eagerness to gain the front ranks of civilized and enlightened nations, as before she exhibited in secluding herself from their touch and influence.

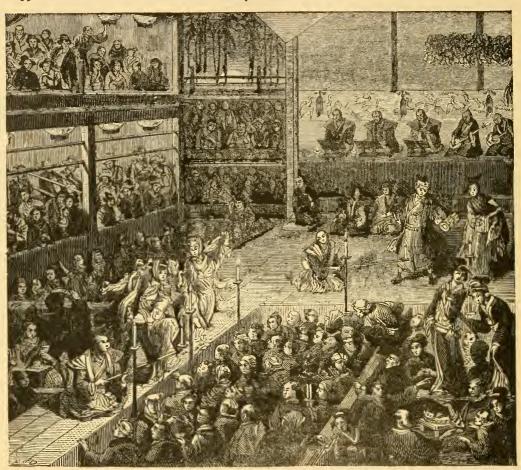
Towards the middle of the nineteenth century European and American vessels began to frequent the Japanese waters, and after the settlement of California American whalers pursued their trade regularly in the home waters of the empire. Many of these were wrecked on the coast of Japan, and their crews were treated with great harshness by the native authorities. In order to put a stop to this, and to establish friendly relations with the empire, the United States government, in 1852, despatched an expedition under the command of Commodore Matthew C. Perry.

The American commander was in structed to demand protection for American seamen wrecked on the Japanese coast, and to effect a treaty of commerce and good will with the imperial government. In July, 1853, he entered the bay of Yedo with four ships of war, and delivered to the Japanese authorities a

letter from the President of the United States, setting forth the demands and wishes of his government. He then sailed for China. In February, 1854, he returned with seven ships of war, and anchored within a few miles of Yedo. He managed by his skillful and judicious efforts to induce the shogun, in other words the military governor of the Eastern provinces, sometimes styled tycoon, to enter into the desired treaty. which was signed at Kanagawa on the 31st of March, 1854, and which opened the ports of Shimoda and Hakodate or Hokodadi to foreign commerce, and made them places of consular residence.

In September a British squadron, under Sir James Stirling, entered the harbor of Nagasaki and concluded a treaty with the shogun, by which Hakodate and Nagasaki were thrown open to foreign commerce. The Russians and Dutch then unde similar treaties with the shogun. On the 17th of June, 1857, Mr. Harris, the United States consul to Japan, made a still more advantageous treaty with the shogun, by which the harbor of Nagasaki was also opened to American commerce.

In 1858, in spite of the opposition of the Japanese, Mr. Harris proceeded to Yedo, and concluded a third treaty still more advantageous to the United States. During the same year Lord Elgin, escorted by a British squadron, reached Yedo and negotiated a treaty between Great Britain and Japan, by which it was agreed that the ports of Hakodate, Kanagawa and Nagasaki, should be opened to British subjects after July I, 1859. The arrival of Commodore Perry the mikado as the spiritual ruler of the empire who did not concern himself with its temporal affairs. The shogun on his part encouraged this belief, and signed the treaties without referring them to the mikado or asking his con-



INTERIOR OF A JAPANESE THEATRE.

was the beginning of the intercourse of Japan with the nations of America and Europe, an intercourse which has entirely changed the destiny of the empire.

All the foreigners made the mistake of regarding the shogun as the rightful Emperor of Japan. They looked upon

sent to their signature. This act was looked upon by the Japanese as a fresh usurpation of power on the part of the shogun, and aroused a strong reaction in favor of the mikado. The nation was opposed to the violation by the shogun of the traditional policy of non intercourse with foreigners, and the

country resounded with the cry, "Honor the mikado and expel the barbarian." The shogun was regarded as a traitor, and the cause of the mikado was greatly strengthened.

In 1858 the shogun died, and the prime minister Ii, a man of great ability and unscrupulous character, became regent. He set aside the true successor, and bestowed the shogunate upon the infant Prince of Kii, but kept the power in his own hands. This arbitrary act aroused a strong opposition to him, which he suppressed by imprisoning and executing the leaders of the movement. In 1859 he despatched an embassy to the United States without consulting the mikado, and so increased the hatred of the people for him. On the 23d of March, 1860, he was assassinated in open daylight in the streets of Yedo.

Firing on Ships.

The party of the mikado now grew with wonderful rapidity, and the shogun's followers, seeing the steady drift of popular sentiment, sought to regain their lost ground by trying to persuade the foreigners to close the ports and leave Japan, but without success. About this time the forces of the Prince of Choshin (Nogato), acting under orders of the mikado, fired upon the ships of the United States, France, Great Britain and the Netherlands. This act was punished by the treaty powers shortly after, by sending a combined squadron to Shimonosek, and capturing that port after a severe bombardment. Japan was compelled to pay an indemnity of \$3,000,ooo. This victory opened the eyes of the Japanese to the power of the foreigners, and made them more cautious in their conduct towards them.

Though the Prince of Choshin had obeyed the mikado in firing upon the foreign vessels, he had disobeved the shogun, and the latter, in 1866, marched to punish him for his disobedience. The forces of the shogun were armed and disciplined in the old Japanese style: those of the Prince of Choshin were armed with European rifles and artillery, and had been disciplined by Dutch officers. A campaign of three months ensued, and resulted in the overwhelming defeat of the shogun. who, worn out with mortification at his failure, and with disease, died on the 19th of September, 1866. He was succeeded by Keiki, the last of the shoguns.

The mikado's party now proceeded to bolder acts, and in October, 1867, urged the mikado to abolish the shogunate and resume the government of the empire. This proposal received so much support among the most powerful princes and nobles of Japan, that on the 9th of November, 1867, Keiki resigned the shogunate.

Radical Changes.

This was a great gain, but it was not all the mikado's party desired. They determined to go further and restore the government to the basis on which it had existed prior to A. D. 1200. On the 3d of January, 1868, they seized the palace, drove out the nobles, and created a government under which the highest offices were filled by the kuge, or court nobles of the imperial family, those of the next order by the daimios or cour. tiers, and those of the third order by men selected from the samurai. arrangement threw the whole power of the state into the hands of the Satsum? Choshin, Tosa, and Hizen clans.

The ex-shogun was greatly displeased with this arrangement, and took up arms to regain his lost power. He was defeated in a three days' battle, and fled to Yedo in an American steamer. Seeing that further resistance was hopeless, he surrendered to the imperial forces, declared his resolution never again to oppose the will of the mikado, and retired to private life. This submission completely re-established the authority of the mikado throughout the empire, and gave peace to the country.

Adopting New Ideas.

Up to this time the party of the mikado had been the bitterest opponents of the treaties negotiated by the shogun with the foreign powers. There were a few among them who had profoundly studied the question, and had seen the folly of their country in holding itself aloof from the rest of the world. These now set to work to promote the intercourse of Japan with the treaty powers, and found this no difficult task, as the leaders of the imperial party had by this time become convinced of the immense superiority of the foreign over the native system of war. They also feared that the foreign powers would compel the empire by force to observe the treaties made with the shogun, and knew that Japan was in no condition to offer a successful resistance.

They accordingly invited the representatives of the foreign powers to a conference at Kioto. Many of the court nobles had never seen a foreigner, and upon beholding them at the conference at once abandoned the prejudices they had cherished against them. The treaties were cordially renewed, the foreign powers recognized the mikado as the

only rightful sovereign of Japan, and the foundations were laid upon which have been built up the intimate and cordial relations which now exist between Japan and the states of Europe and America. Foreign ideas and customs from this time made their way steadily into the empire, and were rapidly adopted by the Japanese. Since 1868 the character of Japanese civilization has undergone a profound change.

The government, the army and navy, and the finances are administered upon a European basis; the European dress is driving out the old native costume; and large numbers of young men destined for the public service are sent to the schools of Europe and the United States to be trained in the learning and civilization of the western world. In all these measures the young Emperor Mutsuhito (the reigning mikado), who came to the throne in 1867, has taken an active part, and has constantly endeavored to promote the civilization of his country and to render more intimate its intercourse with the vestern nations.

Feudal System Destroyed.

The changes which took place in the internal government of the empire after the revolution of 1868 were very rapid. In 1871 the emporer abolished the titles of *kuge* and *daimio* (court and territorial noble), and replaced them by that of *kuazoku* (noble families). This decree deprived the great nobles of their territorial fiefs, which were reclaimed by the crown, and at one blow destroyed the feudal system of Japan. In the same year, in order to place himself more directly at the head of the new state of affairs, the emperor removed his capital

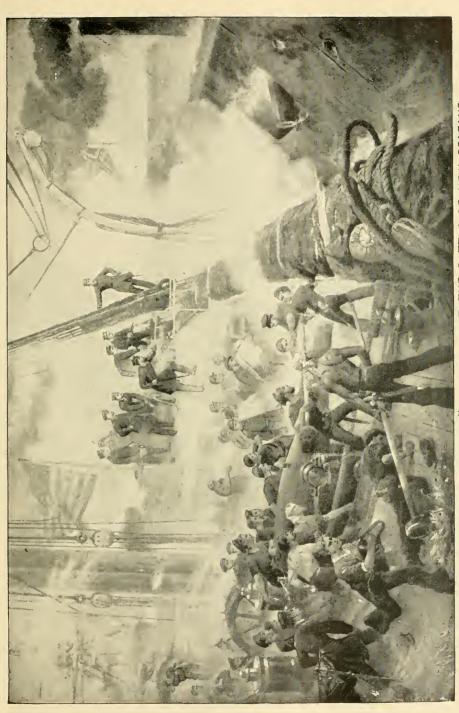


BARTHOLDI STATUE OF LIBERTY

EFFCTED ON BEDLOE'S ISLAND, NEW YORK HARBOR. HEIGHT FROM GROUND, 220 FEET; STONE PEDESTAL 82 FEET HIGH; FOREFINGER 8 FEET LONG; HEAD 14 FEET HIGH AND 40 PERSONS CAN STAND IN IT



ON THE 25TH DAY OF JUNE, 1876, GENERAL GEORGE A. CUSTER ATTACKED A BODY CF SIOUX, AND AFTER THE FIERCEST FIGHT KNOWN IN INDIAN WARFARE. HE AND HIS ENTIRE COMMAND WERE DESTROYED BATTLE OF THE LITTLE HORN RIVER



IN THIS BATTLE ADMIRAL DEWEY WAS A MINOR OFFICER AND RECEIVED HIS FIRST LESSON OF HEROISM FROM FARRAGUT, THE ADMIRAL FARRAGUT'S FLAGSHIP "HARTFORD" AT THE BATTLE OF NEW ORLEANS RENOWNED COMMANDER OF OUR GULF SQUADRON



BATTLE OF SPOTTSYLVANIA

ONE OF THE MOST DESPERATE OF THE CIVIL WAR. GRANT ATTACKED LEE IN HIS EARTHWORKS AND WAS REPULSED WITH DREADFUL SLAUGHTER, YET ON THE NEXT DAY WROTE TO THE SECRETARY OF WAR, "I PROPOSE TO FIGHT IT OUT ON THIS LINE IF IT TAKES ALL SUMMER." TWO DAYS LATER HE CAPTURED AND HELD THE "BLOODY ANGLE"

from the old sacred city of Kioto to the great city of Yedo, the name of which was changed to Tokio (western capital). The government granted to the deposed dainios one-tenth of their former incomes on condition of residing permanently at Tokio. In December, 1871, an embassy was sent to the nations of Europe and America. Each was visited in succession, and new treaties of commerce and friendship were negotiated.

In 1876 the empire took part in the International Centennial Exhibition. held at Philadelphia, in the United States, and gave unmistakable evidence in its superb display of its success in the new career upon which it has entered.

The completion of the translation of the Bible into Japanese was celebrated February 3, 1888. On February 11,

1889, a new constitution for the empire was promulgated by the Mikado at Tokio. Houses of lords and commons were established, and religious liberty and general freedom were granted to all persons, one of the many evidences of the enlightened policy which of late has distinguished the government of the country. New commercial treaties were desired with the European powers, who hesitated to grant the request; one with the United States was promptly signed. No Oriental realm has made more rapid strides in the last quarter of a century than Japan.

The most important events in Japan during the century were connected with her war against China in 1894, a full account of which appears in the history of that empire and need not be repeated here.

REPUBLICS IN SOUTH AFRICA.

NE of the earliest settlements in South Africa was that of the Dutch at the Cape of Good Hope. In 1806 Great Britain acquired their domain, following which the Dutch emigrated in large numbers, moving north and east. They acquired by force of arms from the Zulus the country known as Natal, where they settled. The number of the Boers, as they were called, who left the British colonies was about 10,000. They organized a government, and in 1854 the British guaranteed them complete independence.

The Boers also established a republic known as the Transvaal, the independence of which was acknowledged in 1852. Here they have remained until the present time. They have had the in its minerals, for, in addition to the

name of being very exclusive and refusing rights to foreigners who wished to enter their country. In 1887 the British attempted to take the country, and for a while occupied it. In 1880 the Transvaal Boers threw off the British yoke and re-established the republie, after a conflict with the British, in which the latter were defeated with great loss.

Early in 1896, a British company, with possessions bordering on the Transvaal, attempted to conquer the Boers. In this attempt they were led by Dr. Jameson, but his forces were signally defeated. This disaster caused excitement throughout England, especially as Germany expressed its sympathy with the Boers.

The state has immense latent wealth

numerous gold-fields, the deposits of silver, copper, and lead, iron, coal, cobalt, and other metals and minerals, are sufficent to show that nature has favored the Transvaal beyond all African states. The country is rich in corn and pasture land. The climate is, as a rule, healthy, and in some parts exceptionally bracing. The number of English-speaking residents is fast increasing on account of immigration.

In October, 1899, war broke out between the Transvaal and Great Britain, the latter nation claiming that rights guaranteed by treaty to the subjects of other nations had been denied, and foreigners were the victims of high-handed oppression. Several bloody battles were fought between the Boers and the English troops.

Republic of Liberia.

Liberia is a small republican state of West Africa, and occupies a part of the coast of North Guinea. Length, 600 miles; breadth interiorward, 50 miles. Monrovia is its capital, at the mouth of St. Paul's River. The principal exports are coffee, sugar, palm-oil,

camphor, indigo, ivory, and gold-dust. The first settlement was formed by free negro colonists from the United States, at Cape Mesurado, in 1820. The colony became an independent republic in 1847. The constitution and government are based upon the model of those of the United States.

The Congo Free State has sprung out of the discoveries of Stanley and the explorations of the International Association, founded at Brussels for the opening up to civilization of the Congo and its tributaries. Its autonomy was recognized during 1884 and 1885 by the leading powers of Europe, and by the United States, conditioned upon its maintaining the principles of free trade. There are twelve territorial divisions, the capital being Boma.

The central government is at Brussels, and consists of the king of the Belgians as sovereign, and three departmental chiefs. On the Congo there is an Administrator-General and several European administrators of stations and districts. The rest of West Africa is variously "protected" by England, France, Germany, and Portugal.

PART III.

FAMOUS EXPLORATIONS AND DISCOVERIES

OF THE

NINETEENTH CENTURY.

CHAPTER XVII.

Voyages in the Polar World.

N the year 1829 Captain John Ross, a whaler in Barrow Strait, and brought with his nephew James, having been furnished with sufficient funds by a wealthy distiller named Felix Booth, of London, undertook a private expedition of discovery in a small vessel called the Victory. Ross proceeded down Prince Regent's Inlet to the Gulf of Boothia, and wintered on the eastern side of a land named by him Boothia Felix. In the course of exploring excursions during the summer months James Ross crossed the land and discovered the position of the north magnetic pole on the western side of it, on June 1, 1831. He also discovered a land to the westward of Boothia which he named King William Land, and the northern shore of which he examined.

The most northern point, opposite the magnetic pole, was called Cape Felix, and thence the coast trended south-west to Victory Point. James Ross was at Cape Felix on May 29, 1830. The Rosses never could get their little vessel out of its winter quarters. They passed three winters there, and then fell back on the stores at Fury Beach, where they passed their fourth winter of 1832-33. Eventually they were picked up by Mackenzie, and connected that position

home.

Great anxiety was naturally felt at their prolonged absence, and in 1833, Sir George Back, with Dr. Richard King as a companion, set out by land in search of the missing explorers. Wintering at the Great Slave Lake, he left Fort Reliance on June 7, 1834, and descended the Great Fish River, which is obstructed by many falls in the course of a rapid and tortuous course of 530 miles. The mouth was reached, when the want of supplies obliged them to return. In 1836 Sir George Back was sent, at the suggestion of the Royal Geographical Society, to proceed to Repulse Bay in his ship, the Terror, and then to cross an assumed isthmus and examine the coast-line thence to the mouth of the Great Fish River; but the ship was obliged to winter in the drifting pack, and was brought back across the Atlantic in a sinking condition on account of damage caused by the ice.

The tracing of the polar shores of America was completed by the Hudson's Bay Company's servants. In June 1837 Messrs. Simpson and Dease left Chippewyan, reached the mouth of the

247

with point Barrow, which had been] discovered by the Blossom in 1826.

In 1839 Simpson passed Cape Turnagain of Franklin, tracing the coast eastward so as to connect with Back's work at the mouth of the Great Fish River. He landed at Montreal Island in the mouth of that river, and then advanced eastward as far as Castor and Pollux river, his farthest eastern point. On his return he travelled along the north side of the channel, which is in fact the south shore of the King William Island discovered by James Ross. The south-western point of this Island was named Cape Herschel, and there Simpson built a cairn on August 26, 1839.

Dr. Rae's Discoveries.

Very little more remained to be done in order to complete the delineation of the northern shores of the American continent. This was entrusted to Dr. John Rae, a Hudson's Bay factor, in 1846. He went in boats to Repulse Bay, where he wintered in a stone hut nearly on the Arctic Circle; and he and six Orkney men maintained themselves on the deer they shot. During the spring of 1847 Dr. Rae explored on foot the shores of a great gulf having 700 miles of coast-line. He thus connected the work of Parry, at the mouth of Fury and Hecla Strait, with the work of Ross on the coast of Boothia, proving that Boothia was part of the American continent.

While the English were thus working hard to solve some of the geographical problems relating to Arctic America, the Russians were similarly engaged in In 1821 Lieutenant Anjou made a complete survey of the New Siberia Islands, and came to the con- the obstacle which finally stopped Sir

clusion that it was not possible to advance far from them in a northerly direction, owing to the thinness of the ice and to open water within 20 or 30 miles.

Baron Wrangell prosecuted similar investigations from the mouth of the Kolyma between 1820 and 1823. He made four journeys with dog sledges, exploring the coast between Cape Tchelagskoi and the Kolyma, and making attempts to extend his journeys to some distance from the land. He was always stopped by thin ice, and he received tidings from a native chief of the existence of land at a distance of several leagues to the northward.

In 1843 Middendorf was sent to explore the region which terminates in Cape Tchelyuskin. He reached the cape in the height of the short summer, whence he saw open water and no ice blink in any direction. The whole arctic shore of Siberia had now been explored and delineated, but no vessel had yet rounded the extreme northern point, by sailing from the mouth of the Yenisei to that of the Lena. When that feat was achieved the problem of the north-east passage would be solved.

Story of Franklin.

The success of Sir James Ross's Antarctic expedition and the completion of the northern coast-line of America by the Hudson's Bay Company's servants gave rise in 1845 to a fresh attempt to make the passage from Lancaster Sound to Behring Strait. The story of this unhappy expedition of Sir John Franklin, in the Erebus and Terror, is one of the most thrilling in Arctic exploration.

To understand clearly the nature of

John Franklin, and which also stopped | could reach the channel on the Ameri-Sir Edward Parry in his first voyage, it is necessary to note that westward of Melville and Baring Islands, northward of the western part of the American coast, and northward of the channel leading from Smith Sound, there is a vast unknown space, the ice which encumbers it never having been traversed by any ship. All navigators who have skirted along its edge describe the stupendous thickness and massive proporions of the vast flows with which it is packed.

This accumulation of ice of enormous thickness, to which Sir George Nares has given the name of a "Palæocrystic Sea," arises from the absence of direct communication between this portion of the north polar region and the warm waters of the Atlantic and Pacific. Behring Strait is the only vent in a south-westerly direction, and that channel is so shallow that the heavy ice grounds outside it. In other directions the channels leading to Baffin's Bay are narrow and tortuous. In one place only is there a wide and straight lead. The heavy polar ice flows southeast between Melville and Baring Islands, down what is now called M'Clintock Channel, and impinges on the north-west coast of the King William Land discovered by James Ross.

The Expedition Halted.

It was this branch from the palæocrystic sea which finally stopped the progress of Franklin's expedition. On leaving the winter-quarters at Beechey Island in 1846, Franklin found a channel leading south, along the western shore of the land of North Somerset discovered by Parry in 1819. If he very energetic and able whaling captain,

can coast, lie knew that he would be able to make his way along to Beliring This channel leading south, now called Peel Sound, pointed directly to the south. He sailed down it towards King William Island, with land on both sides.

But directly they passed the southern point of the western land, and were no longer shielded by it, the great palæocrystic stream from Melville Island was fallen in with, pressing on King William Island. It was impassable. The only possibility of progress would have been by rounding the eastern side of King William Island, but its insularity was then unknown.

Anxiety for Franklin.

It was not until 1848 that anxiety began to be felt about the Franklin expedition. In the spring of that year Sir James Ross was sent with two ships, the Enterprise and Investigator, by way of Lancaster Sound. He wintered at Leopold Harbor, near the north-east point of North Devon. In the spring he made a long sledge journey with Lieutenant M'Clintock along the northern and west. ern coasts of North Somerset.

On the return of the Ross expedition without any tidings, the country became thoroughly alarmed. An extensive plan of search was organized—the Enterprise and Investigator under Collison and M'Clure proceeding by Behring Strait while the Assistance and Resolute with two steam tenders, the Pioneer and Intrepid, sailed May 3, 1850, to renew the search by Barrow Strait, under Captain Austin. Two brigs, the Lady Franklin and Sophia, under Captain Penny, a

were sent by the same route. He had with him Dr. Sutherland, a naturalist, who did much valuable scientific work.

Found His Winter Quarters.

Austin and Penny entered Barrow Strait, and Franklin's winter quarters of 1845-46 was discovered at Beechey Island; but there was no record of any kind indicating the direction taken by the ships. Stopped by the ice, Austin's expedition wintered (1850-51) in the pack off Griffith Island, and Penny found refuge in a harbor on the south coast of Cornwallis Island. Austin, who had been with Parry during his third voyage, was an admirable organizer. His arrangements for passing the winter were carefully thought out and answered perfectly. In concert with Penny he planned a thorough and extensive system of search by means of sledge travelling in the spring; and Lieutenant M'Clintock superintended every minute detail of this part of the work with unfailing forethought and consummate skill.

Penny undertook the search by Wellington Channel. M'Clintock advanced to Melville Island, marching over 770 miles in eighty-one days; Captain Ommanney and Sherard Osborn passed southward and discovered Prince of Wales Island. Lieutenant Brown examined the western shore of Peel Sound. The search was exhaustive; but, except the winter quarters at Beechey Island, no record, no sign was discovered.

The absence of any record made Captain Austin doubt whether Franklin had ever gone beyond Beechey Island. So he also examined the entrance of Jones Sound, the next inlet from Baffin's Bay north of Lancaster Sound, on his way

home, and returned to England in the autumn of 1851. This was a thoroughly well-conducted expedition—especially as regards the sledge travelling, which M'Clintock brought to great perfection. So far as the search for Franklin was concerned, nothing remained to be done west or north of Barrow Strait.

In 1851 the Prince Albert schooner; was sent out by Lady Franklin, unde Captain Kennedy, with Lieutenant Bellot of the French navy as second. They wintered on the east coast of North Somerset, and in the spring of 1852 the gallant Frenchman, in the course of a long sledging journey, discovered Bellot Strait separating North Somerset from Boothia—this proving that the Boothia coast facing the strait was the northern extremity of the continent of America.

Three Traveling Parties.

The Enterprise and Investigator sailed from England in January, 1850, but accidentally parted company before they reached Behring Strait. On May 6, 1851, the Enterprise passed the strait, and rounded Point Barrow on the 25th. Collinson then made his way up the narrow Prince of Wales Strait, between Baring and Prince Albert Island, and reached Princess Royal Islands, where M'Clure had been the previous year. Returning southwards, the Enterprise wintered in a sound in Prince Albert Island. Three travelling parties were dispatched in the spring of 1852—one to trace Prince Albert Island in a southerly direction, while the others explored Prince of Wales Strait, one of them reaching Melville Island.

he also examined the entrance of Jones Sound, the next inlet from Baffin's Bay north of Lancaster Sound, on his way coast of North America, reaching Cam-

bridge Bay September 26th, where the second winter was passed. In the spring he examined the shores of Victoria Land. He was within a few miles of Point Victory, where the fate of Franklin would have been ascertained. The Enterprise again put to sea on August 5, 1853, and returned westward along the American coast, until she was stopped by ice and obliged to pass a third winter at Camden Bay. In 1854 this most remarkable voyage was completed, and Captain Collinson brought the Enterprise back to England.

Discovered North-West Passage.

Meanwhile M'Clure, in the Investigator, had passed the winter of 1850-51 at the Princess Royal Islands, only thirty miles from Barrow Strait. In October M'Clure ascended a hill whence he could see the frozen surface of Barrow Strait, which was navigated by Parry in 1819-20. Thus, like the survivors of Franklin's crews when they reached Cape Herschel, M'Clure discovered a north-west passage. It was impossible to reach it, for the branch of the palæocrystic ice which stopped Franklin off King William Land was athwart their northward course.

So as soon as he was free in 1851, M'Clure turned southwards, round the southern extreme of Baring Island, and commenced to force a passage to the northward between the western shore of that land and the enormous fields of ice which pressed upon it. The cliffs rose up like walls on one side, while on the other the stupendous ice of the palæocrystic sea rose from the water to a level with the Investigator's lower yards.

After many hair-breath escapes Mc- in 1854. But Sherard Osborn and Com-Clure took refuge in a bay on the mander Richards did good work. They

northern shore of Bank's Land, which he named "The Bay of God's Mercy." Here the Investigator remained, never to move again. After the winter of 1851–52 M'Clure made a journey across the ice to Melville Island, and left a record at Parry's winter harbor. Abundant supplies of musk ox were fortunately obtained, but a third winter had to be faced. In the spring of 1853 M'Clure was preparing to abandon the ship with all hands, and attempt, like Franklin's crews, to reach the American coast. But succor providentially arrived in time.

The Hudson's Bay Company assisted in the search for Franklin. In 1848 Sir John Richardson and Dr. Rae examined the American coast from the mouth of the Mackenzie to that of the Coppermine. In 1849 and 1850 Rae continued the search; and by a long sledge journey in the spring of 1851, and a boat voyage in the summer, he examined the shores of Wollaston and Victoria Lands, which were afterwards explored by Captain Collinson in the Enterprise.

New Expedition.

In 1852 the British Government resolved to dispatch another expedition by Lancaster Sound. Austin's four vessels were recommissioned, and the North Star was sent out as a depot ship to Beechey Island. Sir Edward Belcher commanded the Assistance, with the Pioneer under Sherard Osborn as steam tender. He went up Wellington Channel to Northumberland Bay, where he wintered, passing a second winter lower down in Wellington Channel, and then abandoning his ships and coming home in 1854. But Sherard Osborn and Commander Richards did good work. They

made sledge journeys to Melville Island and thus discovered the northern side of the Parry group. Captain Kellett received command of the Resolute, with M'Clintock in the steam tender Intrepid.

Among Kellett's officers were the best of Austin's sledge travellers, M'Clintock, Mechani, and Vesey Hamilton, so that good work was sure to be done. George Nares, the future leader of the expedition of 1874-75, was also on board the Resolute. Kellett passed onwards to the westward and passed the winter of 1852-53 at Melville Island. ing the autumn Mecham discovered M'Clure's record, and the safety of her crew was consequently assured, for it was only necessary to send a message across the strait between two fixed positions. This service was performed by Lieutenant Pim early in the following spring.

The officers and crew of the Investigator, led by M'Clure, arrived safely on board the Resolute on June 17, 1853, and they reached England in the following year. They not only discovered but traversed a north-west passage, though not in the same ship, and partly by travelling over ice. For this great feat M'Clure received the honor of knighthood—a reward of fifty thousand dollars being voted to himself, the other officers, and the crew, by a vote of the House of Commons.

Long Sledge Journey.

The travelling parties of Kellett's expedition, led by M'Clintock, Mecham and Vesey Hamilton, completed the discovery of the northern and western sides of Melville Island, and the whole outline of the large Island of Prince

Patrick, still further to the westward. M'Clintock was away from the ship with his sledge party for one hundred and five days and travelled over 1,328 miles. Mecham was away ninety-four days and travelled over 1,163 miles. Sherard Osborn, in 1853, was away ninety-seven days and travelled over 935 miles. The Resolute was obliged to winter in the pack in 1853-54, and in the spring of 1854 Mechani made a most remarkable journey in the hope of obtaining news of Captain Collinson at the Princess Royal Islands. Leaving the ship on April 3d, he was absent seventy days, out of which there were sixty-one and a half days travelling. The distance gone over was 1,336 statute miles. The average rate of the homeward journey was twenty-three and a half miles a day, the average time of travelling each day nine hours twenty-five minutes. This journey is with out parallel in arctic records.

Ships Abandoned.

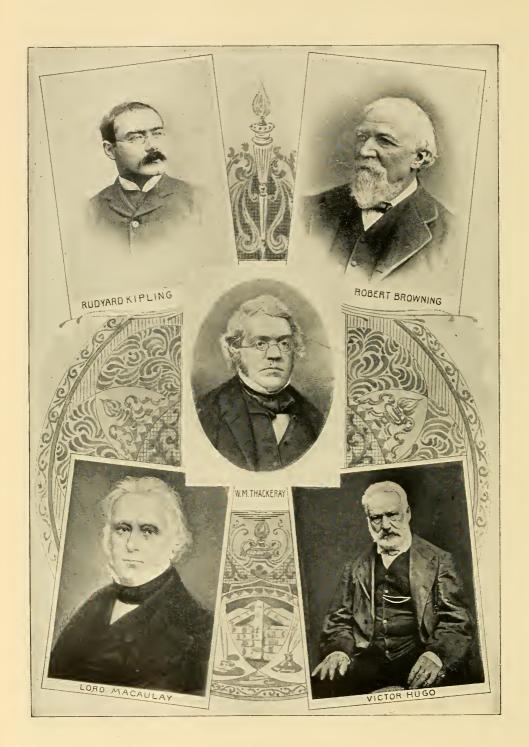
Fearing detention for another winter, Sir Edward Beleher ordered all the ships to be abandoned in the ice, the officers and crews being taken home in the North Star, and in the Phænix and Talbot which had come out from England to communicate. They reached home in October, 1854. In 1852 Captain Inglefield, R.N., had made a voyage up Baffin's Bay in the Isabel as far as the entrance of Smith Sound. In 1853 and 1854 he came out in the Phænix to communicate with the North Star at Beechey Island.

The drift of the Resolute was a remarkable proof of the direction of the current out of Barrow Strait. She was abandoned on May 14, 1854. On Sep-



BATTLE OF ATLANTA

THE UNION ARMY WAS COMMANDED BY GENERAL SHERMAN AND THE CONFEDERATE FORCES BY GENERAL MOOD, THE UNION TROCPS
BEING SUCCESSFUL, BUT LOSING GENERAL MOPHERSON. A VERY BRAVE AND ABLE DPINCE

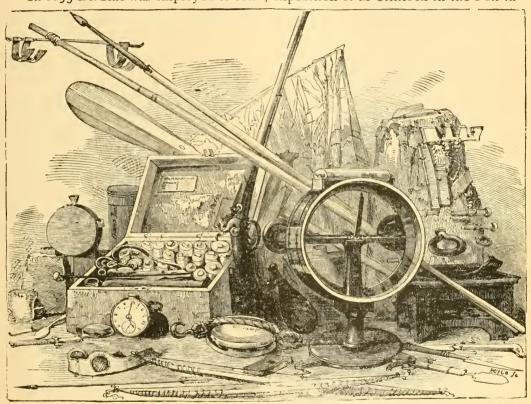


tember 10; 1855, an American whaler sighted the Resolute in 67° North latitude, about twenty miles from Cape Mercy, in Davis Strait. She was brought into an American port, and eventually presented to the British Government. She had drifted nearly a thousand miles.

In 1853 Dr. Rae was employed to con-

in April and May. He succeeded in connecting the discoveries of Simpson with those of James Ross, and thus established the fact that King William Land was an island.

Rae also brought home tidings and relics of Franklin's expedition gathered from the Eskimo; and this led to the expedition of M'Clintock in the Fox in



RELICS OF FRANKLIN'S POLAR EXPEDITION.

aect a few points which would quite complete the examination of the coast of America, and establish the insularity of King William Land. He went up Chesterfield Inlet and the River Quoich for a considerable distance, wintering with eight men at Repulse Bay in a snow house. Venison and fish were abundant. In 1854 he set out on a journey which occupied fifty-six days

search of Franklin. While M'Clintock was prosecuting his exhausting search over part of the west coast of Boothia, the whole of the shores of King William Island, the mouth of the Great Fish River, and Montreal Island, Allen Young completed the discovery of the sonthern side of Prince of Wales Island. The Fox returned to England in the autumn of 1859.

The catastrophe of Sir John Franklin's expedition led to 7,000 miles of coast line being discovered, and to a vast extent of unknown country being explored, securing very considerable additions to geographical knowledge. Much attention was also given to the collection of information, and the scientific results of the various search expeditions were considerable.

The catastrophe also afforded a warning which would render any similar disaster quite inexcusable. If arrangements are always carefully made for a retreat beforeliand, if a depot ship is always left within reach of the advancing expedition as well as of the outer world, and if there is annual communication, with positive rules for depositing records, no such catastrophe can ever happen again.

The Search for Franklin.

The American nation was first led to take an interést in polar research through a very noble and generous feeling of sympathy for Franklin and his brave companions. Mr. Grinnell, of New York, gave practical expression to this feeling. In 1850 he equipped two vessels, the Advance and Rescue, to aid in the search, commanded by Lieutenants De Haven and Griffith, and accompanied by Dr. Kane. They reached Beechev Island on August 27, 1850, and assisted in the examination of Franklin's winter quarters, but returned without wintering.

In 1853 Dr. Kane, in the little brig Advance of 120 tons, undertook to lead an American expedition up Smith Sound, the most northern outlet from Baffin's Bay. The Advance reached Smith Sound on August 7, 1853, but | Sound. Dr. Hayes crossed Smith Sound

was stopped by ice only seventeen miles from the entrance. He described the coast as consisting of precipitous cliffs, 800 to 1200 feet high, and at their base there was a belt of ice about eighteen feet thick, resting on the beach. Dr. Kane adopted the Danish name of "icefoot" (is fod) for this permanent frozen ridge. He named the place of his winter-quarters Van Rensselaer Harbor.

Immense Glacier.

In the spring some interesting work was done. A great glacier was discovered and named the Humboldt glacier, with a sea face forty-five miles long. Dr. Kane's steward, Morton, crossed the foot of this glacier with a team of dogs, and reached a point of land beyond named Cape Constitution. But sickness and want of means prevented much from being done by travelling parties. Scurvy attacked the whole party during the second winter, although the Eskimo supplied them with fresh meat and were true friends in need. On May 17, 1855, Dr. Kane abandoned the brig, and reached the Danish settlement of Upernivik on August 6th. Lieutenant Hartstene, who was sent out to search for Kane, reached Van Rensselaer Harbor after he had gone, but took the retreating crew on board on his return voyage.

On July 10, 1860, Dr. Hayes, who had served with Kane, sailed from Boston for Smith Sound, in the schooner United States, of 130 tons and a crew of fifteen men. His object was to follow up the line of research opened by Dr. Kane. He wintered at Point Foulke, about ten miles from Cape Alexander, which forms the eastern portal of Smith

in the spring with dog-sledges, but his observations are not to be depended on, and it is very uncertain how far he advanced northward on the other side. He returned to Boston on October 23, 1861.

Charles Hall, of Cincinnati, was led to become an arctic explorer through his deep interest in the search for

King William Island. He heard the story of the retreat and of the wreck of one of the ships from the Eskimo; he was told that seven bodies were buried at Todd Island; and he brought home some bones which are believed to be those of Lieutenant Le Vescomte of the Erebus.



KANE AND HIS COMPANIONS BRAVING THE COLD.

Franklin. In his first journey, 1860-62, he discovered the interesting remains of a stone house which Sir Martin Frobisher built on the Countess of Warwick Island in 1578. In his second expedition, 1864-69, Hall, by dint of the most unwearied perseverance at length reached the line of the retreat of the Franklin survivors, at Todd's Island and Peffer river, on the south coast of

Finally, in 1871, he took the Polaris for 250 miles up the channel which leads northwards from Smith Sound. The various parts of this long channel are called Smith Sound, Kane Basin, Kennedy Channel, and Robeson Channel. The Polaris was beset on 30th August; and her winter quarters were in 81° 38′ N., called Thank God Bay. The death of Hall followed and the

subsequent fortunes of the expedition were of the most perilous description.

Between 1858 and 1872 the Swedes sent seven expeditions to Spitzbergen and two to Greenland. All returned with valuable scientific results. of 1864 under Nordenskiold and Duner made observations at eighty different places on the Spitzbergen shores, and fixed the heights of numerous mountains. In 1868, in an iron steamer, the Sophia, the Swedes attained a latitude of 81° 42' N. on the meridain of 18° E., during the month of September. 1872 an expedition consisting of the Polliem steamer and brig Gladen, commanded by Professor Nordenskiold and Lieutenant Palander, wintered in Mussel Bay, on the northern shore of Spitzbergen. In the spring an important sledging journey of sixty days' duration was made over North-East Land. The expedition was in some distress as regards provisions owing to two vessels, which were to have returned, having been forced to winter. But in the summer of 1873 they were visited by Mr. Leigh Smith, in his yacht Diana, who supplied them with fresh provisions.

Pressing Northward.

Dr. Petermann of Gotha urged his countrymen to take their share in the noble work of polar discovery, and at his own risk he fitted out a small vessel called the Germania, which sailed from Bergen in May, 1868, under the command of Captain Koldewey. His cruise extended to Hinlopen Strait in Spitzbergen, but was merely tentative; and in 1870 Baron von Heuglin with Count Zeil explored the Stor Fjord in a Norwegian schooner, and also examined Walter Thymen's Strait. After the re-

turn of the Germania in 1868 a regular expedition was organized under the command of Captain Koldewey, provisioned for two years. It consisted of the Germania, a screw steamer of 140 tons, and the brig Hansa commanded by Captain Hegemann.

Crushed in the Ice.

Lieutenant Payer, the future discoverer of Franz Josef Land, gained his first arctic experience on board the Germania. The expedition sailed from Bremen on the 15th June, 1869, its destination being the east coast of Greenland. But the Hausa got separated from her consort and crushed in the ice. The crew built a house of patent fuel on the floe, and in this strange abode they passed their Christmas. In two months the current had carried them south for 400 miles. By May they had drifted 1100 miles on their ice-raft, and finally, on June 14, 1870, they arrived at the Moravian mission station of Friedriksthal, to the west of Cape Farewell.

Fairer fortune attended the Germania. She sailed up the east coast of Greenland, and eventually wintered at the Pendulum Islands of Clavering. March, 1870, a travelling party set out, under Koldewey and Payer, and reached a distance of 100 miles from the ship to the northward, when want of provisions compelled them to return. cape, named after Prince Bismarck, marked the northern limit of their discoveries. As soon as the vessel was free. a deep branching inlet was discovered stretching for a long distance into the interior of Greenland. Along its shore are peaks 7,000 and 14,000 feet high. The expedition returned to Bremen on September 11, 1870.

Lieutenant Payer was resolved to continue in the path of polar discovery. He and a naval officer named Weyprecht freighted a Norwegian schooner called the Isbjorn, and examined the edge of the ice between Spitzbergen and Nova Zembla, in the summer of 1871. Their observations led them to select the route by the north end of Nova Zembla with a view to making the north-east passage. It was to be an Austria-Hungarian expedition, and the idea was seized with enthusiasm by the whole empire. Weyprecht was to command the ship, while Julius Payer conducted the sledge parties.

A Winter of Adventures.

The steamer Tegethoff, of 300 tons, was fitted out in the Elbe, and left Tromso on July 14, 1872. The season was exceptionally severe, and the vessel was closely beset near Cape Nassau, at the northern end of Nova Zembla, in the end of August. The summer of 1873 found her still a close prisoner drifting, not with a current, but in the direction of the prevailing wind. At length, on the 31st August, a mountainous country was sighted about 14 miles to the north. In October the vessel was drifted within three miles of an island lying off the main mass of land. Payer landed on it. It was named after Count Wilczek, one of the warmest friends of the expedition.

Here the second winter was passed. Bears were very numerous and as many as sixty-seven were killed, their meat proving to be a most efficient remedy against scurvy. In March, 1874, Payer made a preliminary sledge journey in intense cold. On 24th March he started for a more prolonged journey of thirty

days. Payer found that the newly discovered country equalled Spitzbergen in extent, and consisted of two or more large masses—Wilzcek Land to the east, Zichy Land to the west, intersected by numerous fords and skirted by a large number of islands. A wide channel, named Austria Sound, separates the two main masses of land, where Rawlinson Sound forks off to the north-east.

Perilous Voyage.

The mountains attain a height of 2000 to 3000 feet, the depressions between them being covered with glaciers: and all the islands even are covered with a glacial cap. The whole country was named Franz-Josef Land. Payer returned to the Tegethoff on 24th April; and a third journey was undertaken to explore a large island named after McClintock. It then became necessary to abandon the ship and attempt a retreat in boats. This perilous vovage was commenced on 20th May. Three boats stored with provisions were placed on sledges. It was not until 14th August that they reached the edge of the pack and launched the boats.

Eventually they were picked up by a Russian schooner and arrived at Vardo on September 3, 1874. This great achievement is one of the most important connected with the north polar region that has been made in the nineteenth century, and will probably lead in due time to still further discoveries in the same direction.

One of the most interesting problems connected with the physical geography of the polar regions is the history and actual condition of the vast interior of Greenland, which is generally believed to be one enormous glacier. In 1867

Mr. Edward Whymper carefully planned an expedition to solve the question, and went to Greenland, accompanied by Dr. Robert Brown; but the season was too late and progress was stopped, after going a short distance, by the breaking down of the dog-sledges. Brown made most valuable geological and natural history collections, chiefly in the neighborhood of Disco, and still more valuable observations, the publication of which has added considerably to our knowledge. Dr. Rink, for many years royal inspector of South Greenland and the most distinguished authority on all Greenlandic questions, has also visited the inland ice, and has given his stores of information to the world.

Captain Nare's Expedition.

The gallant enterprises of other countries rekindled the zeal of England for arctic discovery; and in October, 1874, the prime minister announced that an expedition would be despatched in the following year. The route by Smith Sound was selected because it gave the certainty of exploring a previously unknown area of considerable extent, because it yielded the best prospect of valuable scientific results, and because it offered, with proper precautions, reasonable security for a safe retreat in case of disaster.

Two powerful screw steamers, the Alert and Discovery, were selected for the service, and Captain Nares was selected as leader. Commander Markham who had made a cruise up Baffin's Bay and Barrow Strait in a whaler during the previous year, Lieutenant Aldrich, an accomplished surveyor, and Captain Feilden, as naturalist, were also in the Alert. The Discovery was

commanded by Captain Stephenson, with Lieutenant Beaumont as first lieutenant. The expedition left Portsmouth on the 29th May, 1875, and entered Smith Sound in the last days of July.

After much difficulty with the drifting ice Lady Franklin Bay was reached, where the Discovery was established in winter-quarters. The Alert passed onwards, and reached the edge of the palæocrystic sea, the ice-floes being from 80 to 100 feet in thickness. Leaving Robeson Channel, the vessel made progress between the land and the grounded floe pieces, and passed the winter off the open coast and facing the great polar pack. Autumn travelling parties were despatched in September and October to lay out depots; and during the winter a complete scheme was matured for the examination of as much of the unknown area as possible, by the combined efforts of sledging parties from the two ships, in the ensuing spring. The parties started on April 3, 1876

Valuable Discoveries.

Captain Markham with Lieutenant Parr advanced, in the face of almost insurmountable difficulties, over the polar pack to the high latitude of 83° 20' 26" N. Lieutenant Aldrich explored the coast-line to the westward, facing the frozen polar ocean, for a distance of 220 miles. Lieutenant Beaumont made discoveries of great interest along the northern coast of Greenland. The parties were attacked by scurvy, which, while increasing the difficulty and hardships of the work a hundredfold, also enhanced the devoted heroism of these gallant explorers. Captain Feilden was indefatigable in making collections,

and was zealously assisted by all the officers.

The expedition returned to England in October, 1876. The Alert reached the highest northern latitude ever attained by any ship, and wintered further north than any ship had ever wintered before. The results of the expedition were the discovery of 300 miles of new coast-line, the examination of this part of the frozen polar ocean, a series of meteorological, magnetic, and tidal observations at two points farther north than any such observations had ever been taken before, and large geological and natural history collections.

Compelled to Return.

In the same year, 1875, Sir Allen Young undertook a voyage in his steam yacht, the Pandora, to attempt to force his way down Peel Sound to the magnetic pole, and if possible to make the north-west passage by rounding the eastern shore of King William Island. The Pandora entered Peel Sound on August 29, 1875, and proceeded down it much farther than any vessel had gone before since it was passed by Franklin's two ships in 1846. Sir Allen sighted Cape Bird, at the northern side of the western entrance of Bellot Strait. But here an ice-barrier right across the channel barred his progress, and he was obliged to retrace his steps, returning to England on October 16, 1875. the following year Sir Allen Young made another voyage in the Pandora to the entrance of Smith Sound.

In 1879 an enterprise was undertaken in the United States, with the object of throwing further light on the sad history of the retreat of the officers and men of Sir John Franklin's expedition, by examining the west coast of King William Island in the summer, when the snow is off the ground. The party consisted of Lieutenant Schwatka of the United States army and three others. Wintering near the entrance of Chesterfield Inlet in Hudson's Bay, they set out overland for the estuary of the Great Fish River, assisted by Eskimo and dogs, on April 1, 1879.

Great Herd of Reindeer.

They only took one month's provisions, their main reliance being upon the game afforded by the region to be traversed. The party obtained, during the journeys out and home, no less than five hundred and twenty-two reindeer. After collecting various stories from the Eskimo at Montreal Island and at an inlet west of Cape Richardson, Schwatka crossed over to Cape Herschel on King William Island in June. He examined the western shore of the island with the greatest care for relics of Sir John Franklin's parties, as far as Cape Felix, the northern extremity.

The return journey was commenced in November by ascending the Great Fish River for some distance and then marching over the intervening region to Hudson's Bay. The cold of the winter months in this country is oftentimes intense, the thermometer falling as low as 70° below zero—so that the return journey was most remarkable, and reflects the highest credit on Lieutenant Schwatka and his companions. As regards the search little was left to be done after M'Clintock, but some graves were found, as well as a medal belonging to Lieutenant Irving of H. M. S. Terror, and some bones believed to have been his, which were brought home and interred at Edinburgh.

Mr. Gordon Bennett, the proprietor of the New York Herald, having resolved to despatch an expedition of discovery at his own expense by way of Behring Strait, the Pandora was purchased from Sir Allen Young, and rechristened the Jeannette. Lieutenant De Long of the United States navy was appointed to command, and it was made a national undertaking by special Act of Congress, the vessel being placed under martial law and officered from the navy.

The Jeannette sailed from Sau Francisco on July 8, 1879, and was last seen steaming towards Wrangell Land on the 3d of September. This land had been seen by Captain Kellett, in H. M. S. Herald on August 17, 1879, but no one had landed on it, and it was shown on the charts by a long dotted line.

Searching Party.

The Jeannette was provisioned for three years, but as no tidings had been received of her up to 1881, two steamers were sent up Behring Strait in search. One of these, the Rodgers, under Lieutenant Berry, anchored in a good harbor on the south coast of Wrangell Land on the 26th August 1881. The land was explored by the officers of the Rodgers and found to be an island about 70 miles long by 28, with a ridge of hills traversing it east and west, the 71st parallel running along its southern shore.

Lieutenant Berry then proceeded to examine the ice to the northward, and attained a higher latitude by 21 miles than had ever been reached before on the Behring Strait meridian. No news was obtained of the Jeannette, but soon afterwards melancholy tidings arrived from Siberia. After having been beset in heavy pack ice for twenty-two months, the Jeannette was crushed and sunk on the 12th June 1881.

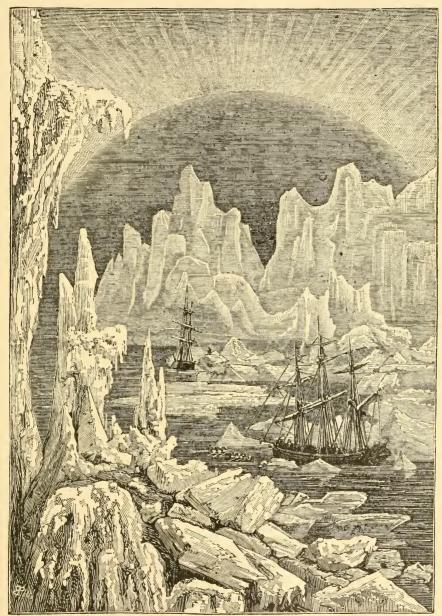
Separated in a Gale.

The officers and men dragged their boats over the ice to an island which was named Bennett Island, where they landed on the 29th July. They reached one of the New Siberia Islands on the 10th September, and on the 12th they set out for the mouth of the Lena. But in the same evening the three boats were separated in a gale of wind. A boat's crew with Mr. Melville, the engineer, reached Irkutsk, and Mr. Melville set out in search of Lieutenant De Long and his party, who had also landed. The other boat was lost. Eventually Melville discovered the dead bodies of De Long and two of his crew on March 23, 1883. They had perished from exhaustion and want of food. The Rodgers was burnt in its winter quarters, and one of the officers, Mr. Gilder, made a hazardous journey homewards through north-east Siberia.

On September 18, 1875, Lieutenant Weyprecht, one of the discoverers of Franz-Joseph Land, read a thoughtful and carefully prepared paper before a large meeting of German naturalists at Gratz on the scientific results to be obtained from polar research and the best means of securing them. He urged the importance of establishing a number of stations within or near the Arctic Circle, in order to record complete series of synchronous meteorological and magnetic observations.

Lieutenant Weyprecht did not live | at another at St. Petersburg in 1882, and cution, but they bore fruit in due time. establish one or more stations where

to see his suggestions carried into exe- it was decided that each nation should



BRILLIANT AURORA IN THE POLAR SEA.

represented at an international polar taken from August 1882. This useful conference at Hamburg in 1879, and project was matured and executed.

The various nations of Europe were | synchronous observations should be

The American stations commenced work in 1882. Lieutenant Greely's party consisted of two other lieutenants, of twenty sergeants and privates of the United States army, and Dr. Pavy, an entliusiastic explorer who had been educated in France, and had passed the previous winter among the Eskimo of Greenland. On August 11, 1881, the steamer Proteus conveyed Lieutenant Greely and his party to Lady Franklin Bay during an exceptionally favorable season; a house was built at the Discover's winter-quarters, and they were left with two years' provisions. The regular series of observations was at once commenced, and two winters were passed without accident. Travelling parties were also sent out in the summer, dogs having been obtained at Disco.

Lieutenant Lockwood made a journey along the north coast of Greenland, and reached a small island. Dr. Pavy and another went a short distance beyond the winter-quarters of the Alert, and a trip was made into the interior of Grinnell Land. But all this region had already been explored and exhaustively examined by the English expedition in 1875–76.

Greely Makes a Start.

As no successor arrived in the summer of 1883—though relieving vessels were despatched both in 1882 and 1883—Lieutenant Greely started from Lady Franklin Bay with his men on the 9th of August, expecting to find a vessel in Smith Sound.

On the 21st of October they were obliged to encamp at Cape Sabine, on the western shore of Smith Sound, and build a hut for wintering. A few

depots were found, which had been left by Sir George Nares and Lieutenant Beebe, but all was exhausted before the spring. Then came a time of indescribable misery and acute suffering. The poor fellows began to die of actual starvation; and when the relieving steamers Thetis and Bear reached Cape Sabine, Lieutenant Greely and six suffering companions were found just alive.

If the simple and necessary precaution had been taken of stationing a depot ship in a good harbor at the entrance of Smith Sound, in annual communication with Greely on one side and with America on the other, there would have been no disaster.

Dr. Nansen in Greenland.

The attention of explorers and scientific men was turned towards Greenland, as the knowledge of the interior of that country was very meagre. 1886 Lieutenant Robert E. Peary visited that island in quest of scientific information. The southern part of the island was crossed on snow shoes from east to west by Dr. Nansen, the famous Norwegian explorer. Peary returned to Greenland in 1891, with a few attendants, and making McCormick Bay a base of operations, set out the following spring, accompanied by only a single companion, on a journey with sledges through the northern part of the island.

His journey of 650 miles was a remarkable feat considering the great difficulties he encountered. He reached the north-east coast of Greenland, but further progress was cut off by an area of broken stones impassable to his sledges. Peary made another journey

in the same direction in 1895, but failed to advance beyond the point gained by his previous expedition.

Dr. Nansen, already mentioned, conceived the idea of reaching the pole by the strong ocean current that is supposed to cross the polar sea. For his expedition he had a ship constructed, so strong as to be able to offer formidable resistance to the ice, and so built that great pressure would lift it to the top of the ice-floe. The intrepid explorer set out in this vessel, the Fram, in June, 1893, and proceeded to New Siberia Islands. Here he anchored his ship to an ice-floe, and waited to see if the current would drift the vessel across the polar sea. It is needless to state that his expectations were not realized.

Great Explorer's Return.

For three years no tidings came from Nansen and his intrepid crew. They appeared to have gone out in the mysterious darkness that veils the polar world, with little prospect of ever returning or leaving any tidings of their fate. But suddenly the world was stirred by the information that the great explorer had returned from his perilous voyage.

Although Dr. Nansen did not accomplish his object, his vessel floated into a higher latitude than had ever been reached before by 200 miles; he was then 300 miles from the point farthest north. Here his vessel turned southward and drifted in the opposite direction. In March, 1895, he left the Fram because of the slow progress made, and began a journey north with one companion. After struggling for a long time against many obstacles he was compelled to relinquish his effort and return.

With his companion, Johansen, he finally arrived at Franz Joseph Land. where they spent the winter of 1895-96, living on the flesh of walruses and bears which they succeeded in capturing. Meanwhile, in 1894, an English explorer, Frederick G. Jackson, visited Franz Joseph Land, where he remained three years, carefully exploring it during this time. In the spring Dr. Jackson met Nansen and his friend, and it was through him that the great Norwegian explorer was rescued and succeeded in returning to his native land. His exploit was considered one of the most remarkable in the history of polar explorations.

He visited England, Scotland and the United States, and was everywhere received with the honor due to his achievements, and wherever he lectured great interest was awakened by his story of the Polar world. No one destitute of great courage, intrepidity and perseverance could have braved the rigors of the Arctic clime and accomplished what Nansen did.

A Balloon Voyage.

In the summer of 1897 an explorer of Swedish birth, S. A. Andree, conceived the idea of reaching the pole by means of a balloon voyage. Although the attempt was considered by most persons as visionary he succeeded in making a start with two companions, holding out expectations of his return in a few months after having accomplished his object. The party was never heard of afterward, and undoubtedly met the fate that was anticipated by all scientific men, who looked upon the undertaking as a piece of the utmost folly.

Mention has been made of Lieutenant

Peary, of the United States Navy, who has distinguished himself in Arctic explorations, especially in Greenland. In 1898 he returned to Greenland to pursue his discoveries. Thus the century has witnessed a great advance in our knowledge of the Polar region, which, by these various voyages and the heroic achievements of those who have undertaken them, has been brought near to the rest of the world and is no longer such an unknown realm as it was a hundred years before and has been for thousands of years.

Life in the Arctics.

Human life in these far regions is even more wonderful than that of the lower animals. It is hardly credible that in these bleak territories of endless snow and winter people should be found who prefer their snowy surroundings to all the glories of more tropical climes, and would not exchange their snow-villages for the splendor of any metropolis in either hemisphere.

There is not a more singular people on the earth than those living within the Arctic belt; nomadic, and yet all their resources are taxed to procure a living; always pressed for food, and yet wonderfully hospitable; true barbarians, but none the less peaceable and clever. Away in the chilly North

nature withholds her gifts of food and warmth, and then with hard and pitiless niggardness, she drives such chilly blasts as if life within her sphere had angered her. Under a glinting sky of frost, within an unbroken landscape of inexpressibly lonesome desolation, the Esquiman makes his home and lives, despite the rigor and barren waste of his nameless country.

These wonderful children of eccentric creation are controlled by no law, either written or traditional, and acknowledge accountability only to their own conscience, and yet they are orderly and given little to crime. They have patriarchs in their tribes who give advice, but never assert authority. Esquimau children render singular obedience to their parents, even after reaching maturity, which proceeds from a remarkable fraternal devotion, for there is no such thing as punishment of a male child by its parents.

The value of the scientific discoveries made during the century by explorers in the Polar world cannot be overestimated. The frigid blanks of the North have been brought near; a new world has been revealed, although buried in snow and ice; adventure has dazzled the nations with its feats, and much has been added to the sum of human knowledge.

CHAPTER XVIII.

Livingstone and Stanley in Central Africa.

HE greatest names in the history of Central African exploration in the Nineteenth Century are those of Livingstone and Stanley. The brave old missionary whose name stands first had passed more than twenty years of his life in Africa when he set out upon his last and most important journey in 1866.

Sailing from Zanzibar with a party of thirty men-Arabs, Hindoos, and negroes—he landed at the mouth of the Rovuma, and proceeded in a southwesterly direction, along a most difficult route. It was a mere footpath, which had been made by the natives through the dense jungle by the easiest way, without any regard to its course being in the right direction. In pursuing this devious track, Livingstone and his party had to cut their way through with axes to enable the camels to pass under the branches of trees, and avoid the impediments presented by the rope-like climbing and trailing plants that festooned them.

In September he was within view of Lake Nyassa. Crossing the mountains, he descended into the valley of the Chambezi, which at that time, misled by Portuguese writers and the similarity of name, he believed to be the head water of the Zambesi. Continuing his journey westward, he entered the kingdom of Lunda, the ruler of which, the famous Cazembe, was a man of considerable intelligence. This potentate, a tall, stalwart negro, clad in crimson cotton, received the traveller very hospi-

tably, and gave orders that he should be allowed to go where he would in his country unmolested.

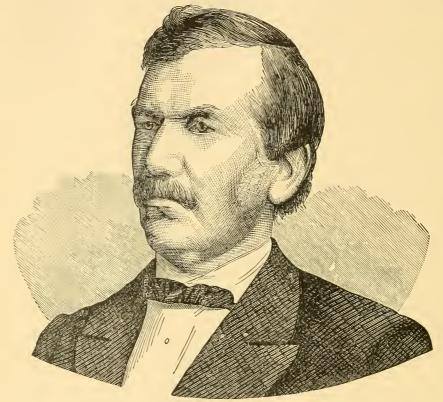
During their interview, the Queen of Cazembe was brought up to the house on a litter, surrounded by her bodyguard. Being a fine, tall young woman, of attractive exterior, she had calculated, it would seem, upon making a powerful impression upon the white man, and had dressed herself for the interview in the choicest articles of attire her wardrobe afforded. But something in her appearance caused the doctor to laugh; her majesty laughed also, perhaps at the appearance of the doctor, who was the first white man she had ever seen. The laugh was echoed by the whole band of bearers, which so disconcerted her that, instead of staying to make a conquest of the doctor, she beat an undignified retreat, followed by her body-guard.

On leaving Cazembe's capital, Livingstone proceeded in a north-easterly direction until he reached a lake, which the natives called Liemba, but which he found, by tracing it northward, to be Tanganika. In November, 1867, he reached the shores of Lake Moero, which is about sixty miles in length, and, rounding its southern extremity, discovered a river, called the Luapula, flowing into it. Following it southward, he found that it proceeded from the great lake of Bangweolo, which is as large as Tanganika; and in exploring the shores of the lake he found the Chambezi flowing into it, and thus discovered that it was not the Zambesi, as he had at first supposed.

He then returned to Lunda, and rested some time with the hospitable monarch of that country. Again resuming his wanderings, he was deserted by all his followers, except two. They

Lualaba. Its course was winding, but with great perseverance he traced it into the long narrow lake of Kamolondo.

Then he turned southward, and traced the river up to the foot of Lake Moero. Turning northward again, he followed repented, however, and returned to his the river through all its numerous



DR. LIVINGSTONE THE CELEBRATED AFRICAN EXPLORER.

service; and in March, 1869, he reached Ujiji.

After resting there three months, he crossed over to Uguhra, on the western shore of Tanganika, and thence accompanied a trading party to Bambarre, where he was detained six months with ulcerated feet. As soon as he was able to travel again, he set off in a northerly direction, and after several days reached a broad river called the

bends to within four degrees of the equator. He heard of another lake farther north, in which it was said to run; and was led by this northward course to the conclusion that he had discovered the headwaters of the Nile in the Chambezi and the Lualaba. He was destitute of means for further explorations, however, and retraced his steps to Ujiji.

So long a time had now elapsed since

any news of the gallant old man had been received in England that much anxiety was felt as to his fate, not only in that country, but throughout the civilized world. Mr. Bennett, proprietor of the "New York Herald," seized the opportunity that thus presented itself, and commissioned one of its most trusty correspondents, the now famous Stanley, to lead an expedition into the wilds of Central Africa in search of Livingstone.

Preparing for the Journey.

Stanley reached Zanzibar in the first week of 1871, and a month later left that place, accompanied by Farquhar and Shaw, who had held the rank of mates in the mercantile marine, an Arab named Selim, who was to serve interpreter, six natives who had travelled with Captain Speke, and eighteen other negroes.

Landing at Bagamoyo, twenty-five miles south of Zanzibar, he was there detained several weeks by the usual difficulty of procuring porters; but at length a start was made for the interior, all engaged in the expedition in the highest spirits. The route pursued had never been trodden by white men before, and for several days presented alternate tracts of jungle and swamp. Then the party entered upon a verdant plain, backed by distant mountains. But the prospect soon changed; the grassy plain was succeeded by extensive reedy swamps, intersected by numerous shallow streams. His followers, too, European as well as native, gave Stanley considerable trouble, of which an instance may be quoted.

Stanley was waiting for Shaw, who was leading a caravan with supplies.

Food being scarce in the camp, and Shaw not arriving, he sent a message to him, requiring him to come on with all the speed he could; but time passed, and the caravan arrived not.

Stanley then set out to meet it, and thus describes Shaw's order of march: "Stout burly Chowereh carried the cart on his head, having found that carrying it was easier than drawing it. The sight was such a damper to my regard for it as an experiment, that the cart was wheeled into the reeds and there left. The central figure was Shaw himself, riding at a gait which rendered it doubtful whether he or his animal felt most sleepy. Upon expostulating with him for keeping the caravan so long waiting when there was a march on hand, he said he had done the best he could; but as I had seen the solemn pace at which he rode, I felt dubious about his best endeavors, and requested him, if he could not mend his pace, to dismount and permit the donkey to proceed to camp, that it might be loaded for the march."

African Scenery.

Wooded valleys succeeded, and in the first week of June the expedition entered the region of Uyanzi, where, says Stanley, "the scenery was much more picturesque than any we had yet seen since leaving Bagamoyo. The ground rose into grander waves, hills cropped out here and there, great castles of syenite appeared, giving a strange and weird appearance to the forest."

Unyanyembe was reached a few days afterwards, but then came many troubles; many of the men were prostrated by sickness, many more deserted, and the invasion of the country by the re-

doubtable Mirambo added to the difficulties by which Stanley was beset. Farquhar first, and then Shaw were left behind, in the care of friendly chiefs, weary and sick, and it was not until September that Stanley was able to leave Unyanyembe for Ujiji.

An Unbounded Forest.

"We ascended," says Stanley, "a ridge bristling with syenite boulders of massive size, appearing above the forest—an illimitable forest, stretching in grand waves far beyond the ken of vision; ridges, forest-clad, rising gently one above another until they receded in the dim purple distance, with a warm haze floating above them, which, though clear enough in our neighborhood, became impenetrably blue in the far distance.

"Woods, woods, woods, one above another, rising, falling and receding—a very leafy ocean. The horizon at all points presents the same view. There may be an indistinct outline of a hill far away, or a taller tree than the rest conspicuous in its outlines against the translucent sky; with this exception, it is the same—the same clear sky dropping into the depths of the forest, the same outlines, the same forest, the same horizon, day after day, week after week.

Early in October the expedition." entered upon what Stanley calls "a grand, noble expanse of park-land, whose glorious magnificence and vastness of prospect, with a far-stretching carpet of verdure, darkly flecked here and there by miniature clumps of jungle, was one of the finest scenes in Africa." Large game was plentiful, herds of zebras, buffaloes, giraffes and antelopes roam-

ing in every direction over the grassy plain, so that the travelers were now abundantly supplied with food.

Farther on, where the undulations swelled into hills and valleys, and the rivers rendered the latter swampy, elephants and rhinoceri were seen for the first time. Leopards were occasionally seen, and lions roared at night around the camp.

Ravines and Naked Rocks.

Winding along the base of the Kasera mountains, they crossed the lofty ridge which bounds the depression of Imrera on the west and north, and on the 29th "were in view of the sublimest but ruggedest scene we had yet beheld in Africa. The country was cut up in all directions by deep, narrow ravines, trending generally toward the northwest, while on either side rose enormous square masses of naked rock (sandstone), with but little vegetation anywhere visible, except it obtained a precarious tenure in the fissured crown of some hill top, or at the base of the scarps which everywhere lifted their fronts to our view."

The Malagarazi was crossed on the 2nd of November, and on the following day news that Livingston was at Ujiji was received from a negro caravan coming from that direction, and Stanley immediately pushed on with renewed vigor.

On the 10th, a silvery gleam seen between the trees afforded the first glimpse of Lake Tanganika; but several hours elapsed before they looked down upon Ujiji, embowered among graceful palms. Then the American flag was unfurled, guns were fired, and as the expedition marched into the village the inhabi-

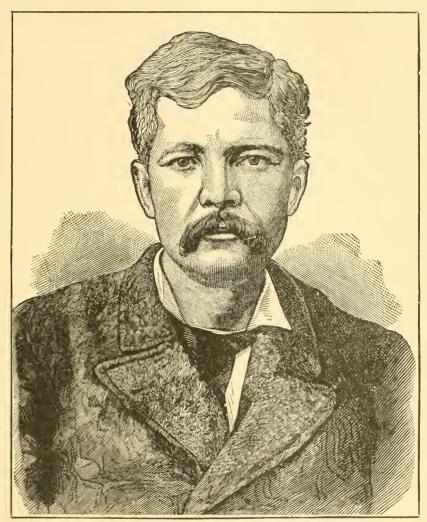
tants, Arabs and negroes of many tribes, swarmed out to meet them.

"Good morning, sir," said a voice from the black crowd, and Stanley, looking round in surprise, saw a joyous"Is Dr. Livingstone here?" asked Mr. Stanley.

"Yes, sir."

"Are you sure?"

"Sure, sir; I leave him just now."



HENRY M. STANLEY, FAMOUS FOR HIS EXPLORATIONS IN AFRICA.

looking negro, wearing a white turban and a long white shirt.

"Who the mischief are you?" the astonished traveller asked.

"I am Susi, the servant of Dr. Livingstone," was the reply.

"Good morning, sir," said another voice.

"Hallo!" said Stanley. "Is this another one?"

"Yes, sir," said another ebony figure.

"Well, what is your name?"

- "My name is Chumah, sir."
- "And is the doctor well?"
- "Not very well, sir."

"Now, you Susi, run and tell the doctor I am coming."

"Yes, sir." And off rushed Susi.

Proceeding through a momently increasing crowd, Stanley met Susi again, breathless with running. He had told the doctor that a white man was coming, but when Livingstone, too much surprised to conceive such a visit possible, asked the traveller's name, Susi had no answer to give him. The news had spread, however, and the Arab magnates of the place gathered under the verandah.

Stanley Meets Dr. Livingstone.

"I pushed back the crowd," says Stanley, "and walked down a living avenue of people, until I came in front of the semi-circle of Arabs, in front of which stood the white man. As I advanced I noticed he was pale, looked wearied, had a gray beard, wore a blue cap with a faded gold band round it, had on a red-sleeved waistcoat, and a pair of grey tweed trousers.

"I would have run to him, only I was a coward in the presence of such a mob—would have embraced him, only he being an Englishman I did not know how he would receive me; so I walked deliberately to him, took off my hat and said, 'Dr. Livingstone, I presume?' 'Yes,' said he, with a smile, lifting his cap slightly. I replaced my hat on my head, and he puts on his cap, and we grasp hands, and I say, 'I thank God, doctor, I have been permitted to see you.' He answered, 'I feel thankful that I am here to welcome you.' I turned to the Arabs, took off my hat to

them in response to the saluting chorus of yambos I received, and the doctor introduced them to me by name."

The Arabs, with the delicacy of true politeness, soon left the two Europeans together, and then Stanley handed to Livingstone a bag of letters which had been lying for months at Unyanyembe, and the doctor had many questions to ask, which passed the afternoon and evening.

One morning they embarked in a large canoe, lent by one of the Arab gentlemen of the place, and steered northward, keeping close to the shore, "with a range of hills, beautifully wooded and clothed with green grass, sloping abruptly, almost precipitously, into the depths of the fresh-water sea, towering immediately above us, and as we rounded the several capes or points, roused expectations of some new wonder, or some exquisite picture. Nor were we disappointed.

Gardens and Palmy Forests.

"From Bagamoyo to Ujiji I had seen nothing to compare to them—these fishing settlements under the shade of palms and plantains, banians, and mimosa, with cassava gardens to the right and left of palmy forests, and patches of luxuriant grain looking down upon the quiet bay."

The northern shores of the lake were flat, with many reed-beds, and crocodiles were numerous, though on the southern portion they were seldom seen. Skirting these marshy shores, the explorers reached the western side of the lake, which rose much more loftily and precipitously than the eastern. On the 12th of December they regained Ujiji, from which they had been absent twenty-eight days. Liv-

ingstone then commenced writing letters, and copying memoranda of his explorations and discoveries into his journal, which, with the letters, Stanley was to take to England on his return.

"I sketched him," says the latter, "while sitting in his shirt-sleeves in the verandah, with his diary on his knee, as he pondered on what he had witnessed during his long marches."

Livingstone and Stanley left Ujiji in company on the 27th of November with the British and American flags waving at the prows of the two large canoes lent them by the friendly Arabs. Skirting the eastern shore in a southward direction, the travellers landed at Urimba, and, after waiting to be joined by those of their followers who had gone by land, started up the valley of the Loajeri for Unyanyembe. It was soon found that the guide knew nothing about the road, notwithstanding his voluble assurances that he was well acquainted with the topography of all of the surrounding country. Stanley therefore put himself at the head of the caravan, and led a due easterly course, as indicated by the compass.

Stanley and the Elephant.

One day, about a fortnight after their departure from Ujiji, and when food was becoming scarce, Stanley took his rifle and strolled up a picturesque ravine in quest of game. Advancing through thick forests, he suddenly found himself confronted with a huge elephant. "Methought," says the traveller, "when I saw his trunk stretched forward, like a warning finger, that I heard a voice say, "Siste, venator!" But whether it did not proceed from my imagination—no, I believe it pro-

ceeded from one of my party, who must have shouted 'Lo, an elephant! an elephant, my master!' for the young rascal had fled as soon as he witnessed the awful colossus in such close vicinage. Recovering from my astonishment, I thought it prudent to retire also. As I looked behind, I saw him waving his trunk, which I understood to mean, 'Good bye, young fellow! It is lucky for you you went in time, for I was going to pound you to a jelly.'"

Had to Live on Mushrooms.

Tracks of animals were frequently observed, but, it being the rainy season, the game was scattered, and none could be procured. Persistently holding an easterly course, Stanley led the way over ridge after ridge, seeing rivers foaming and brawling through narrow beds that in summer were dry, and on the ninth day of the march saw Magdala Mount, bearing north-east, and knew that they were approaching Imrera.

Rain had fallen every day, and a veil of grey haze hung over the forest. Mushrooms were abundant, and for the last day or two constituted the travellers' only food. Arrived at Imrera, the natives crowded around them with supplies and congratulations; but they halted only a day there, and on the 19th two zebras fell to Stanley's rifle, and the caravan was again joyous.

On the 31st they met a caravan on its way from Unyanyembe to Ujiji, and learned the death of Shaw at the former place, the result of fever, rendered fatal by intemperance. The Gombe was reached on the 7th of February, and they camped near one of its largest lakes, which is several miles in length,

and swarms with hippopotami and crocodiles. Here numerous imprints of lions' feet were observed, besides those of elephants, rhinoceri, hogs, and antelopes; and on the following day, while looking for game, Stanley was startled by the roaring of three lions, apparently close at hand.

Bounded into the Forest.

Instinctively cocking his rifle, he glanced keenly around, and detected, not the lions, but a large antelope, which stood trembling, as if it dreaded the fatal spring of the forest lords. Stanley fired, and the antelope gave a tremendous bound, and rushed into the forest, where, though wounded, as shown by its bloody trail, it disappeared. The report seemed to have scared the lions, for they were not seen or heard again.

Unyanyembe was reached on the 18th of February, and the valley of Khiwhara entered with flags flying and guns firing. Stanley's first act was to raise a monument over the grave of Shaw. Fifty men were engaged for two days in bringing rocks to the spot, with which a cairn eight feet long and five broad was constructed, which Livingstone said would ever afterwards be known as the grave of the first white man who had died in Unyamwezi.

Stanley remained in his old quarters, with Livingstone as his guest, until the 14th of March, when they separated; the latter resolved not to leave Africa until the mystery of the Nile sources was finally cleared up, and the former resumed his return journey to Zanzibar.

On the 27th, when the expedition was encamped in the shade of a group of colossal baobabs, they were startled

by the bellowing of war-horns, and at first thought that an attack was about to be made on the camp. It soon became known, however, that the alarm was on account of the rumored incursion of an unfriendly tribe.

Stanley thus describes the scene which this alarm preluded:—"The men rushed to their villages, and in a short time we saw them arrayed in full fighting costume. Feathers of the ostrich and the eagle waved over their fronts, or the mane of the zebra surrounded their heads; their knees and ankles were hung with little bells; joho robes floated behind, from their necks; spears, assegais, knob-sticks, and bows were flourished over their heads, or held in their right hands, as if ready for hurling.

A Mimic War.

"On each flank of a large body which issued from the principal village, and which came at a uniform swinging double-quick, the ankle and knee bells all chiming in admirable unison, were a cloud of skirmishers, consisting of the most enthusiastic, who exercised themselves in mimic war as they sped along. Column after column, companies from every village, hurried past our camp, until, probably, there were nearly a thousand soldiers gone to the war." At nightfall these warriors returned from the forest. There had been no fighting, the alarm having been without foundation.

On the 30th the expedition arrived at Khonze, and halted near the village, while some friendly Wagogo travellers who had joined them, settled the customs duties, or tribute, with the chief. The Wagogos ran back to the halting-place, breathless, shouting, "Why do

you halt here? Do you wish to die? These pagans will not take the tribute, but they boast they will eat up all your cloth." Close upon their heels came the chief and his fighting men, all armed.

Stanley ordered his men to load, and then strode up to the chief, and asked whether he had come to take the cloth by force, or would accept quietly what was given him. A Wanyamwezi, who had instigated the chief to make an exorbitant demand, was about to speak, but Stanley pushed him aside, and threatened to shoot him first if he was forced to fight. The chief laughed at the man's discomfiture, and in a short time he and Stanley settled the matter to their mutual satisfaction.

Danger of a Massacre.

Two days afterwards, whilst halting near the village of Mapanga, they were surprised by a rush of forty or fifty armed men from the jungle, all whooping and yelling, and brandishing their spears, in a manner unmistakably hostile. The moment was critical. One spear thrown, one musket fired, would have been the signal for an onslaught, the prelude, perhaps, of a massacre.

The opposing forces were numerically equal; but Stanley knew that the whole of his men could not be relied upon for a fight, and prudence united with humanity in suggesting an effort to settle the cause of quarrel peacefully. Without arising from the bale on which he was seated, he desired his flag-bearer to inquire whether the chief of the Khonze came to rob them.

"No," replied the chief. "We don't want to rob you, or to stop the road; but we want the tribute."

"Don't you see us halted, and a bale opened to send it?" said Stanley, directing his attention to a bale of goods which had just been opened. "We have halted so far from your village that, when the tribute is settled, we may proceed on our way, as the day is yet young."

The chief laughed, and explained in his turn that, as he and his men were cutting wood for a new fence for the village, a lad brought the news that a caravan was about passing through the country without stopping. The tribute was then settled amicably, and the chief begged Stanley to make rain for him, as none had fallen for months, and his crops were suffering. Our traveller told him that, though white men were very clever, much superior to the Arabs, they could not make rain; and, though disappointed, the chief was satisfied, and accompanied the expedition some distance to show them the road.

Memorial to Farquhar.

On the 7th of April the village was reached at which Farquhar had been left, and had died a few days afterwards. The chief showed Stanley the spot on which the corpse had been deposited, but not a vestige of the remains could be discovered. A mound of stones was raised upon the spot, however, as a memorial.

Continuing their journey, they found the river Mukondokwa so swelled by the rains that it swept through the valley like a torrent, while the fields were flooded, and every nullah was a stream. Three times the foaming flood was crossed at the fords by the help of ropes fastened to the trees on either bank. Rain descended heavily every day, and the drenched travellers had to wade through the floods or tramp through dripping jungles.

On the 13th they reached a river which, though narrow, was too deep to be fordable. They had to halt, therefore, and fell a tree, which they contrived should fall across the stream, and along this Stanley led the way, the rest following by bestriding the tree and pushing their bales and boxes before them. One young fellow, who was carrying on his head the box containing Livingstone's letters and journals, impelled by excess of zeal or reckless bravado, plunged into the stream. Stanley watched him in an agony of fear. Suddenly the man, stepping into a hole, was immersed up to his chin.

A Frightened Negro.

"Look out!" exclaimed Stanley, pointing a revolver at him; "Drop that box and I'll shoot you!" All the men stood still, or motionless bestrode their primitive bridge, to gaze at their imperiled companion. The frightened negro was grey with fear, but making a desperate effort, he got the precious box across in safety.

An hour afterwards they came to the river of which this stream was a branch, and found it a broad flood of brown and foaming water. They constructed a raft, by cutting down four trees and lashing them together, but it sank as soon as it was launched. All their ropes were then tied together, making a line 180 feet long, one end of which was tied round a strong swimmer, who undertook to lash it to a tree on the other side.

The negro, strong swimmer as he was, was carried far down the stream,

but he succeeded in gaining the opposite bank, and securing the rope to a tree. By means of the rope both men and baggage were dragged through the water, the more valuable boxes being conveyed upon a sort of light hand-barrow resting upon men's shoulders.

The River Rising.

A superficial knowledge of the physical geography of Africa scarcely prepares us for such scenes as meet the eye of the traveller in the rainy season. "Within twenty feet of our camp," says Stanley, "was a rising river, with flat, low banks; above us was a gloomy, weeping sky; surrounding us on three sides was an immense forest, on whose branches we heard the constant pattering rain; beneath our feet was a great depth of mud, black and loathsome. Add to these the thought that the river might overflow and sweep us to utter destruction." The strong current of the Makata, fifty yards wide, was crossed by swimming, and on the 20th the expedition was at Simbimwenni, where the flooded Ungerengeri had swept away the whole of the river wall and about fifty houses. Many of the inhabitants had been drowned, and the rest had abandoned the place, of which a hurricane had made a wreck.

The rain had now ceased, but the jungle was a pestiferous swamp, where huge snakes hung upon the branches of trees, and land-crabs, scorpions, and innumerable creeping things, swarmed upon the black mud beneath. On the 4th of May the expedition was within four miles of Bagamoyo, but that space was covered with flood-water, and they had to camp on its western margin

until canoes could be brought to ferry them over.

Bagamoyo was entered at sunset on the 6th, the arrival being signalized by the firing of guns and much shouting and gesticulating, after the manner of the country. Arabs and Hindoos, Beloochees and negroes, thronged about the men who had performed such a wonderful march, and when they had reached the centre of the town, Stanley was greeted and congratulated by Lieutenant Henn, of the Livingstone Relief

Expedition, which was to have done what had already been accomplished by Stanley; by Mr. Oswald Livingstone, the doctor's son; and the Rev. Charles New, the missionary.

The long march was ended, and on the day after his arrival at Bagamoyo the Arab dhow which conveyed the expedition back to Zanzibar, anchored in the harbor. Soon afterward Stanley returned to relate his wonderful adventures and discoveries in Central Africa.

CHAPTER XIX.

Stanley's Great Journeys Across Africa.

E have now to describe one of the most extraordinary, if not actually the greatest feat ever performed in the annals of modern exploration. This expedition undertaken by Henry M. Stanley from Zanzibar right across the African continent to the Congo, was so full of perilous adventure, so remarkable for pluck and resolution, that it stands out boldly upon the canvas of history as the greatest achievement of our times.

Stanley's own account of what preceded his great undertaking is full of interest: "While returning to England in April, 1874, from the Ashantee War the news reached me that Livingstone was dead—that his body was on its way to England! Livingstone had then fallen! He was dead! He had died by the shores of Lake Bemba, on the threshold of the dark region he wished to explore! The work he had promised to perform was only begun when death overtook him!

"The effect which this news had upon me, after the first shock passed away, was to fire me with a resolution to complete his work, to be, if God willed it, the next martyr to geographical science, or, if my life was to be spared, to clear up not only the secrets of the Great River throughout its course, but also all that remained still problematic and incomplete of the discoveries of Burton and Speke, and Speke and Grant.

"The solemn day of the burial of bar island in six Arab vessels.

the body of my great friend arrived. I was one of the pall-bearers in Westminster Abbey, and when I had seen the coffin lowered into the grave, and had heard the first handful of earth thrown over it, I walked away sorrowing over the fate of David Livingstone."

Soon the resolve was formed to complete, if possible, the work Livingstone had been compelled to leave undone. In this memorable expedition "Daily Telegraph," of London, and the "New York Herald" newspapers were associated. Mr. Stanley was commissioned to complete the discoveries of Speke, Burton, and Livingstone. His party from England consisted of Francis and Edward Pocock and Frederick A barge, named the Lady Alice, was taken in sections, besides two other boats, with a perfect equipment. When all preparations had been completed, and the farewell dinners eaten, Stanley left England, to begin his perilous journey, on the 15th of August, 1874.

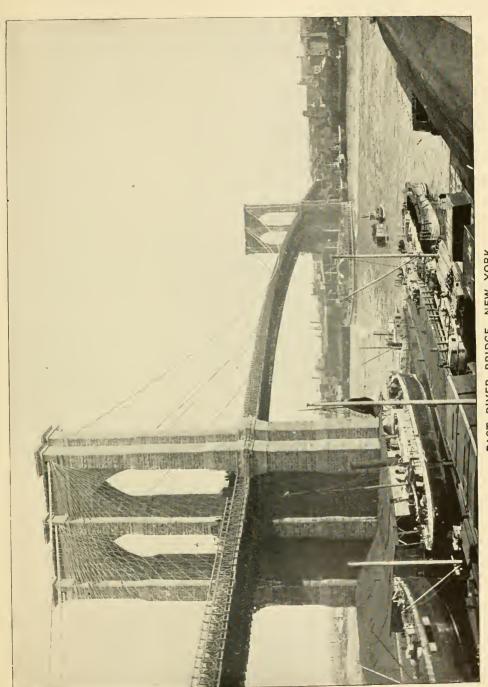
He reached Zanzibar September 21st, 1874, and there found many former associates of his search for Doctor Livingstone. He engaged quite a little army of followers to go with him and carry the outfit. This outfit, which consisted of a most miscellaneous collection of articles, weighed 18,000 pounds, and was, with the party, carried across to the continent from Zanzibar island in six Arab vessels. On the



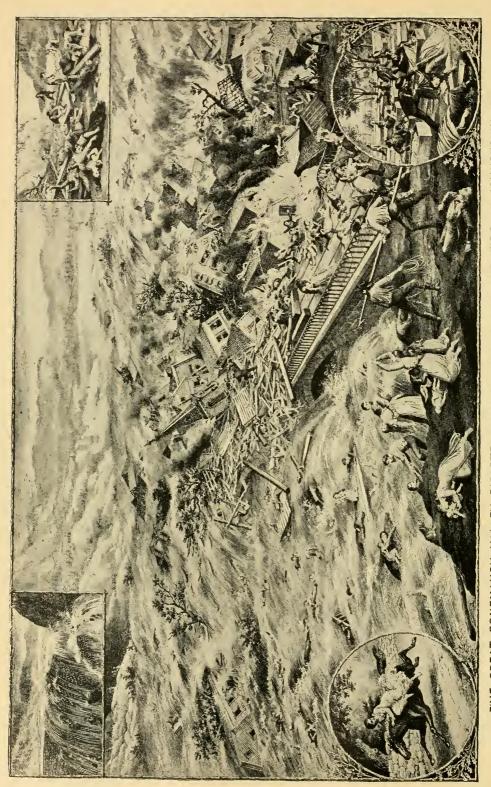
THE CEREMONY, WHICH WAS MOST IMPOSING, TOOK PLACE AT MOSCOW, MAY 26TH, 1896, IN THE PRESENCE OF THE ROYAL FAMILY OF RUSSIA.
AND THE REPRESENTATIVES AND DIGNITARIES OF OTHER NATIONS CORONATION OF NICHOLAS II AS CZAR OF RUSSIA



A DEFENSIVE WORK, TO WHICH THE DERVISHES CLUNG WITH THE FEROCITY OF WILD ANIMALS AT BAY, WAS STORMED WITH GREAT GALLANTRY AND CAPTURED AFTER A HAND-TC-HAND COMBAT. THIS VICTORY PREPARED THE WAY FOR THE CAPTURE OF KHARTOUM WAR IN THE SOUDAN-DESPERATE CHARGE OF THE BRITISH AND EGYPTIAN TROOPS



THIS FAMOUS BRIDGE WAS BEGUN IN 1870, AND OPENED TO THE PUBLIC ON THE 24TH OF MAY, 1883. THE TOTAL COST OF ERECTION WHICH WAS BORNE BY THE CITIES OF NEW YORK AND BROOKLYN, WAS \$15,500,000. IT IS BY FAR THE I ONGEST SUSPENSION BRIDGE IN THE WORLD, BEING 5989 FEET LONG EAST RIVER BRIDGE, NEW YORK



THE MOST APPALLING DISASTER IN THE HISTORY OF OUR COUNTRY WAS CAUSED BY THE BREAKING OF THE SOUTH FORK DAM, WHICH PRECIPITATED AN IMMENSE RODY OF WATER INTO THE VALLEY BELOW, SWEEPING TOWNS AND VILLAGES AND SEVERAL THOUSAND PEOPLE TO DESTRUCTION THE GREAT CONEMAUGH VALLEY DISASTER, MAY 31, 1889.-FLOOD AND FIRE AT JOHNSTOWN, PA.

morning of the 17th of November the comforts for the dead had no meaning. start was made into the interior.

The first stage of this journey was to the Victoria Nyanza, which Stanley desired to explore. The imperfect description and explanations of previous travellers had left much to be decided concerning this great inland sea. "Was it the source of the Nile or of the Congo?" "Was it part of a lake system, or a lake by itself?" These questions Stanley had determined to answer once for all.

Many Adventures.

The advance to the great Lake Victoria was full of adventurous interest. Travelling in the "Dark Continent" means being at times in the wilderness without a guide, or with traitors acting as guides, which is a worse alternative. This was Stanley's fate, and he was deserted in the waste with a small stock of food. Through the terrible "Jungle" the men had to crawl, cutting their way, guided solely by the compass, overcome by hunger and thirst, desertions frequent, sickness stalking alongside. This was indeed "famine-stricken Ugogo."

While on this disastrous march he lost five of his people, who "wandered on helplessly, fell down, and died." The country produced no food, or even game, unless lions could be so called. Two young lions were found in a den, and were quickly killed and eaten. This was the only food for the whole expedition! Stanley tells us how he returned to camp, and was so struck by the pinched jaws of his followers that he nearly wept. He decided to utilize his precious medical stores, and wisely, for the people were famishing; medicinal

comforts for the dead had no meaning. So he made a quantity of gruel, which kept the expedition alive for eight and forty hours, and then the men he had despatched to Suma for provisions returned with food. Refreshed they all marched on, so that they might reach Suma next morning.

Hostile Natives.

After proceeding twenty miles, they came to the cultivated districts and encamped. But the natives of Suma were hostile, and the increasing sick list made a four days' halt necessary. There were thirty men ailing from various diseases. Edward Pocock was taken ill here, and on the fourth day he became delirious; but the increasing suspicions of the natives—who are represented as a very fine race—made departure necessary, and so a start was made on the 17th of January, in very hostile company.

The famine in Ugogo had severely tried every man's constitution, and all felt weak in spirit if not ill in body. "Weary, harassed, feeble creatures," they reached Chiwyu, four hundred miles from the sea, and camped neathe crest of a hill 5,400 feet high. Here Edward Pocock breathed his last. He was laid under an acacia, and upon the trunk of this fine old tree a cross was cut deeply, in memory of a faithful follower.

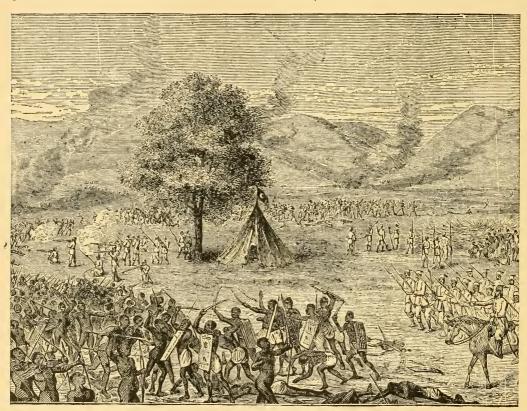
Hence two rivulets run, gradually converging, and finally uniting into a stream which trends toward Lake Victoria. So here the extreme southern sources of the Nile were discovered; but up to this point the explorer had, as he said, "child's play," to what he afterwards encountered. We have already

seen what this child's play was like. Stanley proceeded gently to Vinyata, where the expedition arrived on the 21st of January, 1875. Here a magic doctor paid Stanley a visit, and cast longing eyes at the stores.

Next day, after the departure of the magic doctor, who came for another present, the natives showed hostile shelter, and used the sections of the

cowardice the wish for peace. There were so many tempting articles toostores dear to the native mind, which the inhabitants coveted. No peace would be made at any price, and the savages attacked the camp in force.

Stanley disposed his men behind hastily-erected earthworks and other



FIERCE ATTACK BY NATIVES UPON THE EXPLORERS.

symptoms. One hundred savages, armed and in warlike costume, came around, shouting and brandishing their weapons. At this juncture Stanley, following Livingstone's practice, decided to make no counter demonstration; but to remain quiet in camp, and provoke no hostility. This plan did not answer, however. The natives mistook for

Lady Alice barge as a citadel for final occupation. There were only seventy effective men to defend the camp but these were divided into detachments and subdivided. One sub-detachment was quickly destroyed, and in the day's fight twenty-one soldiers and one messenger were killed-three wounded.

Stanley's men, however, pursued the

retreating enemy, and burned many villages, the men bringing in cattle and grain as spoils. Next day the natives came on again, but they were quickly routed, and the expedition continued its way through the now desolate valley unmolested. So the Iturnians were punished, after three days of battle.

Losses of the Expedition.

The victory, however, had not been much to boast of. After only three months' march, the expedition had lost 120 Africans and one European, from the effects of sickness and battle. There were now only 194 men left of 356 who had set out with the expedition. They passed on, however, toward the Victoria Nyanza, and after escaping the warlike Mirambo, who fought everybody on principle, Stanley reached Kagehyi on the 27th of February. He was now close to the Lake, having marched 720 miles; average daily march, ten miles.

On the 8th of March Stanley, leaving F. Pocock to command the camp, set forth with eleven men in the Ladv Alice, to explore the Lake and ascertain whether it is one of a series, as Dr. Livingstone said it was. The explorer began by coasting Speke Gulf. Many interesting observations were made. He penetrated into each little bay and creek, finding indications that convinced him that the slave trade is carried on there. But the explorer had to battle for his information. Near Chaga the natives came down, and, after inducing him to land, attacked him; but Stanley "dropped" one man, and the natives subsided. On another occasion the natives tried to entrap him, but he escaped by firing on the savages, killing three men, and sinking their canoes with bullets from an elephant rifle.

Continuing his course now unopposed, Stanley coasted along the Uganda shore. Just as he was about to depart, on the following morning, he perceived six beautiful canoes, crowded with men, all dressed in white, approaching; they were the king's people conveying a messenger from the King of Uganda to Stanley, begging a visit from him. This messenger was gorgeously arrayed for the important occasion; he wore a bead-worked head-dress, above which long white cock's feathers waved, and a snowy white and long-haired goatskin, intertwined with a crimson robe, depending from his shoulders, completed his costume. Approaching Stanley, he delivered his message thus:

Invitation from a King.

"The Kabaka (King) sends me with many salaams to you. He is in great hopes that you will visit him, and has encamped at Usavara, that he may be near the lake when you come. He does not know from what land you have come, but I have a swift messenger with a canoe who will not stop until he gives all the news to the Kabaka. mother dreamed a dream a few nights ago, and in her dream she saw a white man on this lake in a boat coming this way, and the next morning she told the Kabaka, and lo! you have come. Give me your answer, that I may send the Twiyanzi-yanzi-yanzi!" messenger. (Thanks, thanks, thanks.)

Thus delivering himself, the messenger, whose name was Magassa, implored Stanley to remain one day longer, that he might show him the hospitalities of his country, and prepare him for a grand

reception by the king, to which Stanley consented.

Magassa was in his glory now. His voice became imperious to his escort of 182 men; even the feathers of his curious head-dress waved prouder, and his robe had a sweeping dignity worthy of a Roman emperor's. Upon landing, Magassa's stick was employed frequently. The sub-chief of Kadzi was compelled to yield implicit obedience to his viceregal behests.

"Bring out bullocks, sheep, and goats, milk, and the mellowest of your choice bananas, and great jars of maramba, and let the white man and his boatmen eat, and taste the hospitalities of Uganda. Shall a white man enter the Kabaka's presence with an empty belly? See how sallow and pinched his cheeks are. We want to see whether we can show him a kindness superior to what the pagans have shown him."

The Explorer Feted.

Five canoes escorted the travellers to Usavara, the capital of King Mtesa. The explorer was most kindly received, and closely questioned upon subjects of so diverse a character as to remind Stanley of a college examination for a degree.

King Mtesa appeared quite a civilized monarch, quite a different being from what he had been when Speke and Grant had visited him as a young man. He had become an adherent of Mahomet, wore Arab dress, and conducted himself well. He entertained Stanley with reviews of canoes, a naval "demonstration" of 84 "ships" and 2,500 men! Shooting matches, parades, and many other civilized modes of entertainment were practiced for the amuse-

ment of the white man. In Uganda the traveller is welcomed, and perfectly safe.

King Mtesa's country is situated on the equator, and is a much more pleasant land than might be supposed from its geographical position, being fertile, and covered with vegetation. It is a peculiarly pleasant land for a traveller, as it is covered with roads, which are not only broad and firm, but are cut almost in a straight line from one point to another.

Good Roads.

Uganda seems to be unique in the matter of roads, the like of which are not to be found in any part of Africa, except those districts which are held by Europeans. The roads are wide enough for carriages, but far too steep in places for any wheeled conveyance; but as the Waganda (the name given to the inhabitants of Uganda) do not use carriages of any kind, the roads are amply sufficient for their purposes. The Waganda have even built bridges across swamps and rivers, but their knowledge of engineering has not enabled them to build a bridge that would not decay in a few years.

Like many other tribes which bear, but do not deserve, the name of savages, the Waganda possess a curiously strict code of etiquette, which is so stringent on some points that an offender against it is likely to lose his life, and is sure to incur a severe penalty. If, for example, a man appears before the king with his dress tied carelessly, or if he makes a mistake in the mode of saluting, or if, in squatting before his sovereign, he allows the least portion of his limbs to be visible, he is led off to instant execution.

As the fatal sign is given, the victim is seized by the royal pages, who wear a rope turban around their heads, and at the same moment all the drums and other instruments strike up, to drown his cries for mercy. He is rapidly bound with the ropes snatched hastily from the heads of the pages, dragged off, and put to death, no one daring to take the least notice while the tragedy is being enacted.

Token of Royal Birth.

They have also a code of sumptuary laws which is enforced with the greatest severity. The skin of the serval, a kind of leopard cat, for example, may only be worn by those of royal descent. Once Captain Speke was visited by a very agreeable young man, who evidently intended to strike awe into the white man, and wore round his neck the serval-skin emblem of royal birth. The attempted deception, however, recoiled upon its author, who suffered the fate of the daw with the borrowed plumes. An officer of rank detected the imposture, had the young man seized, and challenged him to show proofs of his right to wear the emblem of royalty. As he failed to do so, he was threatened with being brought before the king, and so compounded with the chief for a fine of a hundred cows.

Mtesa was a complete African Bluebeard, continually marrying and killing, the brides, however, exceeding the victims in number. Royal marriage is a very simple business in Uganda. Parents who have offended their king and want to pacify him, or who desire to be looked on favorably by him, bring their daughters and offer them as he sits

at the door of his house. As is the case with all his female attendants, they are totally unclothed, and stand before the king in ignorance of their future.

If he accepts them, he makes them sit down, seats himself on their knees, and embraces them. This is the whole of the ceremony, and as each girl is thus accepted, the happy parents perform the curious salutation called "n'yanzigging," that is, prostrating themselves on the ground, floundering about, clapping their hands, and ejaculating the word "n'yans," or thanks, as fast as they can say it.

Brides by the Wholesale.

Twenty or thirty brides will sometimes be presented to him in a single morning, and he will accept more than half of them, some of them being afterward raised to the rank of wives, while the others are relegated to the position of attendants.

Now and then the king held a review, in which the valiant and the cowards obtained their fitting rewards. These reviews offered most picturesque scenes. "Before us was a large open sward, with the huts of the queen's Kamraviono or commander-in-chief beyond. The battalion, consisting of what might be termed three companies, each containing two hundred men, being drawn up on the left extremity of the parade ground, received orders to march past in single file from the right of companies at a long trot, and re-form again at the end of the square.

"Nothing conceivable could be more wild or fantastic than the sight which ensued; the men were all nearly naked, with goat or cat skins depending from their girdles, and smeared with war colors, according to the taste of the individual; one-half of the body red or black, the other blue, not in regular order; as, for instance, one stocking would be red, and the other black, whilst the breeches above would be the opposite colors, and so with the sleeves and waistcoat.

"Every man carried the same arms, two spears and one shield, held as if approaching an enemy, and they thus moved in three lines of single rank and file, at fifteen or twenty paces asunder, with the same high action and elongated step, the ground leg only being bent, to give their strides the greater force.

Fantastic Parade.

"After the men had all started, the captains of companies followed; even more fantastically dressed; and last of all came the great Colonel Congow, a perfect Robinson Crusoe, with his long white-haired goat-skins, a fiddle-shaped leather shield, tufted with hair at all six extremities, bands of long hair tied below the knees, and a magnificent helmet covered with rich beads of every color in excellent taste, surmounted with a plume of crimson feathers, in the centre of which rose a bent stem tufted with goat's hair. Next, they charged in companies to and fro, and finally the senior officers came charging at their king, making violent professions of faith and honesty, for which they were applauded. The parade then broke up, and all went home."

Stanley, after remaining some time with Mtesa, departed in October to explore the country lying between Albert Nyanza and the Victoria Nyanza. This time he had with him an escort of

Sambusi. The expedition, after a pleasant march, came within a few miles of the Albert Nyanza, but then the native warriors wished to return, and Stanley yielded perforce. He returned, but the faint-hearted "general" was put in irons by Mtesa, whom he had shamed.

Imposing Ceremonies.

The expedition reached Mtesa's on the 23d of August, and the king received Stanley in his council chamber with great ceremony and many evidences of friendship. Stanley took this occasion to inform him of the object of his visit, which was to procure guides and an escort to conduct him to Albert Lake.

Mtesa replied that he was now engaged in a war with the rebellious people of Uvuma, who refused to pay their tribute, harassed the coast of Chagwe and abducted his people, "selling them afterward for a few bunches of bananas," and it was not customary in Uganda to permit strangers to proceed on their journeys while the king was engaged in war; but as soon as peace should be obtained he would send a chief with an army to give him safe conduct by the shortest route tothe lake. Being assured that the war would not last long, Stanley resolved to stay and witness it as a novelty, and take advantage of the time to acquire information about the country and its people.

On the 27th of August Mtesa struck his camp, and began the march to Nakaranga, a point of land lying within seven hundred yards of the island of Ingira, which had been chosen by the Wavuma as their depot and stronghold. Mtesa's men, under a "general" named He had collected an army numbering

150,000 warriors, as it was expected that he would have to fight the rebellious Wasoga as well as the Wavuma. Besides this great army must be reckoned nearly 50,000 women, and about as many children and slaves of both sexes, so that at a rough guess, after looking at all the camps and various tributary nations which, at Mtesa's command, had contributed their quotas, the number of souls in Mtesa's camp must have been about 250,-000!

Stanley had the pleasure of reviewing this immense army as it was put in motion towards the battle-ground. He describes the officers and troops in the following graphic style:

"The advance-guard had departed too early for me to see them, but, curious to see the main body of this great army pass, I stationed myself at an early hour at the extreme limit of the camp.

"Brave as a Lion."

"First with his legion, came Mkwenda, who guards the frontier between the Katonga valley and Willimiesi against the Wanyoro. He is a stout, burly young man, brave as a lion, having much experience of wars, and cunning and adroit in his conduct, accomplished with the spear, and possessing, besides, other excellent fighting qualities. I noticed that the Waganda chiefs, though Muslimized, clung to their war-paint and national charms, for each warrior, as he passed by on the trot, was most villainously bedaubed with ochre and pipe-clay. The force under the command of Mkwenda might be roughly numbered at 30,000 warriors and camp-followers, and though the path was a mere goat-track, the rush of but a gun would have been effective,

this legion on the half-trot soon crushed out a broad avenue.

"The old general Kangau, who defends the country between Willimiesi and the Victoria Nile, came next with his following, their banners flying, drums beating, and pipes playing, he and his warriors stripped for action, their bodies and faces daubed with white, black, and ochreous war-paint.

Splendid Warriors.

"Next came a rush of about 2,000 chosen warriors, all tall men, expert with spear and shield, lithe of body and nimble of foot, shouting as they trotted past their war-cry of 'Kavya, kavya' (the two last syllables of Mtesa's title when young-Mukavya, 'king'), and rattling their spears. Behind them, at a quick march, came the musket-armed body-guard of the emperor, about two hundred in front, a hundred on either side of the road, enclosing Mtesa and his Katekiro, and two hundred bringing up the rear, with their drums beating, pipes playing, and standards flying, and forming quite an imposing and warlike procession.

"Mtesa marched on foot, bare-headed, and clad in a dress of blue check cloth, with a black belt of Huglish make round his waist, and—like the Roman emperors, who, when returning in triumph, painted their faces a deep vermillion—his face dyed a bright red. The Katekiro preceded him, and wore a dark-grey cashmere coat. I think this arrangement was made to deceive any assassin who might be lurking in the bushes. If this was the case the precaution seemed wholly unnecessary, as the march was so quick that nothing

and the Wavuma and Wasoga have no such weapons.

"After Mtesa's body-guard had passed by, chief after chief, legion after legion, followed, each distinguished to the native ear by its different and peculiar drum-beat. They came on at an extraordinary pace, more like warriors hurrying up into action than on the march, and it is their custom, I am told, to move always at a trot when on an enterprise of a warlike nature."

A Big War-Boat.

In the ensuing conflict King Mtesa's army was repulsed. Stanley finally asked of him 2,000 men, telling him that with this number he would construct a monster war-boat that would drive the enemy from their stronghold.

This proposition gave Mtesa intense delight, for he had begun to entertain grave doubts of being able to subjugate the brave rebels. The 2,000 men being furnished, Stanley set them to cutting trees and poles, which were peeled and the bark used for ropes. He lashed three canoes, of seventy feet length and six-and-a-half feet breadth, four feet from each other. Around the edge of these he caused a stockade to be made of strong poles, set in upright and then intertwined with smaller poles and rope bark.

This made the floating stockade seventy feet long and twenty-seven feet wide, and so strong that spears could not penetrate it. This novel craft floated with much grace, and as the men paddled in the spaces between the boats they could not be perceived by the enemy, who thought it must be propelled by some supernatural agency. It was manned by two hundred and

fourteen persons, and moved across the channel like a thing of life.

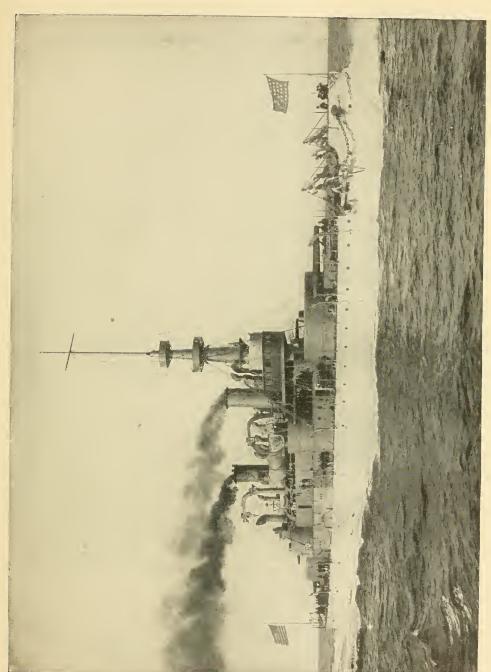
As this terrible monster of the deep approached the enemy, Stanley caused a proclamation to be made to them, in deep and awful tones, that if they did not surrender at once their whole island would be blown to pieces. This stratagem had the desired effect; the Wavuma were terror-stricken and surrendered unconditionally. Two hours later they sent a canoe and fifty men with the tribute demanded. Thus ended the war and preparations were at once made to advance.

Stanley turned toward Lake Tanganyika, and camped at Ujiji, where he had met David Livingstone. Thence he journeyed to Nyangwe, the farthest northern place attained by Cameron. Cameron had gone south to Benguela.

Famous Tipo-tipo.

While in the vicinity of Nyangwe, Stanley chanced to meet the famous trader, Tipo-tipo, who had befriended Cameron while on his journey, having conducted him as far as Kasongo's country. From him he learned that Cameron had been unable to explore the Lualaba, and thus the work which Livingstone had not been able to complete was as yet unfinished.

Not believing, as Livingstone did, that the Lualaba was the remote southern branch of the Nile, but having the same conviction as Cameron, that it was connected with the Congo, and was the eastern part of that river, and having, what Livingstone and Cameron had not, an ample force and sufficient supplies, he determined to follow the Lualaba, and ascertain whither it led. He met with the same difficulty that



U. S. BATTLESHIP INDIANA



THOMAS A. EDISON IN HIS LABORATORY

Livingstone and Cameron encountered in the unwillingness of the people to supply canoes.

They informed him, as they had the two previous explorers, that the tribes dwelling to the north on the Lualaba were fierce and warlike cannibals, who would suffer no one to enter their territories, as the Arab traders had frequently found to their cost. That between Nyangwe and the cannibal region the natives were treacherous, and that the river ran through dreadful forests, through which he would have to make his way—information which afterwards proved to be true.

The Terrible Dwarfs.

He nevertheless resolved to go; but it was not easily accomplished, as the people of Nyangwe filled his followers with terror by the accounts they gave of the ferocious cannibals, the dwarfs with poisoned arrows who dwelt near the river, and the terrible character of the country through which they would have to pass; which had such a disheartening effect upon them that difficulties arose which would have been insurmountable to any one but a man of Stanley's indomitable perseverance, sagacity and tact. He overcame all obstacles; succeeded in getting canoes, and in engaging an Arab chief and his followers to accompany him a certain distance; an increase of his force which gave confidence to his own people.

Of course there was a good deal of palavering before the Arab, Tipo-tipo, could be induced to join the expedition and brave the inevitable perils that would attend it.

Tipo-tipo listened respectfully to Stanley's proposition, and then called

in one of his officers who had been to the far north along the river, requesting him to impart such information as he possessed in regard to the people inhabiting that country. This man told a marvelous tale, almost rivaling the wonderful creations of the Arabian Nights; and Stanley subsequently learned by his own experience that much of the story was true.

Remarkable Story.

"The great river," said Tipo-tipo's officer, "goes always towards the north, until it empties into the sea. We first reached Uregga, a forest land, where there is nothing but woods, and woods, and woods, for days and weeks and months. There was no end to the woods. In a month we reached Usongora Meno, and here we fought day after day. They are fearful fellows and desperate. We lost many men, and all who were slain were eaten. But we were brave and pushed on.

"When we came to Kima-Kima we heard of the land of the little men, where a tusk of ivory could be purchased for a single cowrie (bead). Nothing now could hold us back. We crossed the Lumami, and came to the land of the Wakuma. The Wakuma are big men themselves, but among them we saw some of the dwarfs, the queerest little creatures alive, just a yard high, with long beards and large heads.

"The dwarfs seemed to be plucky little devils, and asked us many questions about where we were going and what we wanted. They told us that in their country was so much ivory we had not enough men to carry it; 'but what do you want with it, do you eat

it?' said they. 'No, we make charms of it, and will give you beads to show us the way.' 'Good, come along.'

Must See Their King.

"We followed the little devils six days, when we came to their country, and they stopped and said we could go no further until they had seen their king. Then they left us, and after three days they came back and took us to their village, and gave us a house to live in. Then the dwarfs came from all parts. Oh! it is a big country! and everybody brought ivory, until we had about four hundred tusks, big and little, as much as we could carry. We bought it with copper, beads, and cowries. No cloths, for the dwarfs were all naked, king and all. We did not starve in the dwarf land the first ten days. Bananas as long as my arm, and plantains as long as the dwarfs were tall. One plantain was sufficient for a man for one day.

"When we had sufficient ivory and wanted to go, the little king said no; 'this is my country, and you shall not go until I say. You must buy all I have got; I want more cowries;' and he ground his teeth and looked just like a wild monkey. We laughed at him, for he was very funny, but he would not let us go. Presently we heard a woman scream, and rushing out of our house, we saw a woman running with a dwarf's arrow in her bosom.

"Some of our men shouted, 'The dwarfs are coming from all the villages in great numbers; it is war-prepare!' We had scarcely got our guns before the little wretches were upon us, shooting their arrows in clouds. They

Their arrows were poisoned, and many of our men who were hit, died.

"Our captain brandished his twohanded sword, and cleaved them as you would cleave a banana. The arrows passed through his shirt in many places. We had many good fellows, and they fought well; but it was of no use. The dwarfs were firing from the tops of the trees; they crept through the tall grass close up to us, and shot their arrows in our faces. Then some hundred of us cut down banana-trees, tore doors out, and houses down, and formed a boma at each end of the street, and then we were a little better off, for it was not such rapid, random shooting; we fired more deliberately, and after several hours drove them off.

Caught the King.

"But they soon came back and fought us all that night, so that we could get no water, until our captain-oh! he was a brave man, he was a lion!—held up a shield before him, and looking around, he just ran straight where the crowd was thickest; and he seized two of the dwarfs, and we who followed him caught several more, for they would not run away until they saw what our design was, and then they left the water clear. We filled our pots and carried the little Shaitans (devils) into the boma; and there we found that we had caught the king. We wanted to kill him, but our captain said no, kill the others and toss their heads over the wall; but the king was not touched.

"Then the dwarfs wanted to make peace, but they were on us again in the middle of the night, and their arrows sounded 'twit,' 'twit' in all directions. screamed and yelled like monkeys. At last we ran away, throwing down

everything but our guns and swords. But many of our men were so weak by hunger and thirst that they burst their hearts running, and died. Others lying down to rest found the little devils close to them when too late, and were killed. Out of our great number of people only thirty returned alive, and I am one of them."

Stanley listened with rapt attention to the recital of this wonderful story, and at its conclusion he said: "Ah! good. Did you see anything else very wonderful on your journey?"

Huge Serpents.

"Oh yes! There are monstrous boaconstrictors in the forest of Uregga, suspended by their tails to the branches, waiting for the passerby or for a stray antelope. The ants in that forest are not to be despised. You cannot travel without your body being covered with them, when they sting you like wasps. The leopards are so numerous that you cannot go very far without seeing one. Every native wears a leopardskin cap.

"The sokos (gorillas) are in the woods, and woe befall the man or woman met alone by them; for they run to you and seize your hands, and bite the fingers off one by one, and as fast as they bite one off, they spit it out. Wasongora Meno and Waregga are cannibals, and unless the force is very strong, they never let strangers pass. It is nothing but constant fighting. Only two years ago a party armed with three hundred guns started north of Usongora Meno; they only brought sixty guns back, and no ivory. If one tries to go by the river, there are falls after falls, which carry the people over and drown them."

It required no little heroism on the part of Stanley to face the dangers which he knew must lie between him and that point one thousand eight hundred miles distant, where the Congo, ten miles wide, rolls into the broad bosom of the Atlantic. Notwithstanding all the dangers which lay before them, Tipo-tipo agreed to accompany Stanley with his soldiers, the distance of sixty marches, for \$5,000. One would naturally suppose that he, of all others, would shrink from such a task, seeing that in his last effort to reach the unexplored territory beyond, he had lost five hundred men.

Exacting Conditions.

The conditions under which he agreed to escort Stanley were, that the sixty marches should not consume more than three months' time, and if, when they had gone that distance, he should come to the conclusion that he could not reach the mouth of the Congo, then he would return to Nyangwe; or, if he chanced to fall in with any Portuguese traders, and desired to accompany them to the coast, he should give him (Tipotipo) two-thirds of his force, as a guard to protect him while on his return to Nyangwe.

But Stanley did not propose to have all the conditions on the side of the chief, and after refusing to grant the chief two-thirds of his force to protect him on his return, he made the following condition: Should Tipo-tipo fail to perform faithfully his part, and should he through fear return before the sixty marches had been made, he should forfeit the \$5,000, and not be allowed a single man of Stanley's force to accompany him on his return. After some

delay the chief assented to the contract as written by Stanley, and both men signed it.

Before it had been signed, however, Stanley went to Pocock and told him just how matters stood, and showed him the dangers which must attend any attempt to proceed, but could they do so, it would draw upon the expedition the comments of the entire world. It was a fearful risk to run, but Pocock resolved to stand by him, and before he had finished, the latter replied, "Go on."

Ah, they little knew when they made that agreement, what fate awaited them in the near future. The men were next informed of the determination to push on to the coast, and were told that if at the end of sixty marches they fell in with traders going eastward, and they wished to return to Nyangwe they could do so. The men promised to remain with him, and he hastened to complete his arrangements.

Journey Begun.

On November 5th Tipo-tipo, with seven hundred men joined Stanley, and they set out on their journey. Stanley now carried the Lady Alice across the 350 miles which intervened between Ujiji and Nyangwe, which is situated on the Lualaba (of Livingstone), which Stanley as well as Cameron believed was a branch of the Congo. We shall now follow Stanley briefly in his discovery along that river, which he had determined to explore.

On the 5th of November he set out. He reinforced his following, and took supplies for six months. He had with him 140 rifles and seventy spearmen and could defy the warlike tribes of

which he had heard so much, and he made up his mind to "stick to the Lualaba fair or foul!" For three weeks he pushed his way along the banks, meeting with tremendous difficulties, till all became disheartened. Stanley said he would try the river. The Lady Alice was put together and launched, and then the leader declared he would never quit it until he reached the sea. "All I ask," said he to his men, "is that you follow me in the name of God."

"In the name of God, master, we will follow you," they replied. They did, bravely.

Passing the Rapids.

A skirmish occurred at the outset, by the Ruiki river, and then the Ukassa rapids were reached. These were passed in safety, one portion of the expedition on the bank, the remainder in canoes. So the journey continued, but under very depressing circumstances, for the natives, when not hostile, openly left their villages, and would hold no communication with the strangers. Sickness was universal. Small-pox, dysentery, and other diseases raged, and every day a body or two was tossed into the river. A canoe was found, repaired, and constituted the hospital, and so was towed down stream.

On the 8th of December a skirm-ish occurred, but speedily ended in the defeat of the savages, who had used poisoned arrows. At Vinya-Njara again, another serious fight ensued, the savages rushing against the stockades which surrounded the camp, and displaying great determination. The attack was resumed at night. At daybreak, a part of the native town

was occupied, and there again the fighting was continued. The village was held, but the natives were still determined and again attacked; the arrows fell in clusters, and it was a very critical time for the voyagers.

Mutiny in Camp.

Fortunately the land division arrived and settled the matter; the savages disappeared, and the marching detachment united with Stanley's crews. That night Pocock was sent out to cut away the enemy's canoes and that danger was over. But now the Arab escort which had joined Stanley at Nyangwe became rebellious, and infected the rest. Stanley feared that all his people would mutiny, but he managed them with a firm and friendly hand. So that danger passed. All this time the people had been dying of fever, small-pox, and poisoned arrows, and the constant attacks of the enemy prevented burial of the dead or attendance on the sick and wounded.

On the 26th of December, after a merry Christmas, considering the circumstances, the expedition embarked, 149 in all, and not one deserted. Tomorrow would echo the cry "Victory or Death." The explorers passed into the portals of the Unknown, and on 4th January they reached a series of cataracts, now named Stanley Falls. This was a cannibal country, and the man-eaters hunted the voyagers "like game." For four and twenty days the conflict continued, fighting, foot by foot, the forty miles or so which were covered by the cataracts, and which the expedition had to follow by land, foraging, fighting, encamping, dragging the fleet of canoes, all the time with their lives in their hands, cutting their way through the forest and their deadly enemies.

Yet as soon as he had avoided the cannibals on land, they came after him on the water. A flotilla of fifty-four canoes, some enormous vessels, with a total of nearly two thousand warriors, were formidable obstacles in the way. But gun-powder won the day, and the natives were dispersed with great loss, the village plundered of its ivory, which was very plentiful, and the expedition in all this lost only one man, making the sixteenth since the expedition had left Nyangwe.

Grand Cataracts.

Some of the cataracts Stanley describes as magnificent, the current boiling and leaping in brown waves six feet high. The width in places is 2,000 and 1,300 feet narrowing at the falls. After the great naval battle, Stanley found friendly tribes who informed him the river, the Lualaba, which he had named the Livingstone, was surely the Congo, or the River of Congo. Here was a great geographical secret now disclosed, and success seemed certain. It was attained, but at a great price, as we shall see. More battles followed the peaceful days; then the friendly tribes were again met with, and so on, until the warfare with man ceased, and the struggle with the Congo began in earnest.

There are fifty-seven cataracts and rapids in the course of the river from Nyangwe to the ocean, a distance of eighteen hundred miles. One portion of one hundred and eighty miles took the explorers five months. The high cliffs and the dangerous banks required

the greatest caution to pass, and had Stanley not determined to cling to the river; had he led his men by land past the cataract region, he would have done better, as the events prove. During that terrible passage he lost precious lives, including the brave Pocock and Kalulu—the black boy, Stanley's favorite who proved to be of great service.

Livingstone Falls.

March 12th found them in a wide reach of the river, named Stanley Pool, and below that they "for the first time heard the low and sullen thunder of Livingstone Falls." From this date the river was the chief enemy, and at the cataracts the stream flows "at the rate of thirty miles an hour!" The canoes suffered or were lost in the "cauldron," and portages became necessary. The men were hurt also; even Stanley had a fall, and was half stunned. There were sundry workers, and seventeen canoes remaining on the 27th of March.

The descent was made along the shore below Rocky Island Falls, and in gaining the camping-place Kalulu, in the "Crocodile" canoe, was lost. This boat got into mid-stream, and went gliding over the smooth, swift river to destruction. Nothing could save it or its occupants. It whirled round three or four times, plunged into the depths, and Kalulu and his canoe-mates were no more. Nine men, including others in other canoes, were lost that day.

Says Stanley: "I led the way down the river, and in five minutes was in a new camp in a charming cove, with the cataract roaring loudly about 500 yards below us. A canoe came in soon after with a gleeful crew, and a second one also arrived safe, and I was about congratulating myself for having done a good day's work, when the long canoe which Kalulu had ventured in was seen in mid-river, rushing with the speed of a flying spear towards destruction. A groan of horror burst from us as we rushed to the rocky point which shut the cove from view of the river.

"When we had reached the point, the canoe was half-way over the first break of the cataract, and was then just beginning that fatal circling in the whirlpool below. We saw them signaling to us for help; but alas! what could we do there, with a cataract between us? We never saw them more. A paddle was picked up about forty miles below, which we identified as belonging to the unfortunate coxswain, and that was all."

An Untimely Death.

Stanley felt this loss keenly, for he loved Kalulu almost like a younger brother. The boy had been presented to him by the Arabs of Unvanvembe on the occasion of his first visit there in search of Livingstone. He was then a mere child, but very bright and quick for one of his race and age. Stanley took him to the United States, where he attended school eighteen months, and rapidly developed into an intelligent and quick-witted youth. When Stanley was preparing for his second expedition Kalulu begged to be allowed to accompany him, and he cheerfully granted the request. His untimely death made so deep an impression upon Stanley that he named the fatal cataract Kalulu Falls in honor of his memory.

below us. A canoe came in soon after Three out of the four men contained with a gleeful crew, and a second one in the boat were special favorites of

Stanley. They had been deceived by the smooth, glassy appearance of the river, and had pulled out boldly into the middle of it, only to meet a dreadful fate. Even while they gazed upon the spot where the frail craft was last seen upon the edge of the brink, another canoe came into sight, and was hurried on by the swift current towards the yawning abyss. As good fortune would have it, they struck the falls at a point less dangerous than that struck by the unfortunate Kalulu, and passed them in safety. Then they worked the canoe closer to the shore, and springing overboard, swam to the land. If those yet to come were to be deceived by the appearance of the river, Stanley saw that he was destined to lose the greater part of his men.

"I Am Lost, Master."

In order to prevent so sad a calamity, he sent messengers up the river to tell those yet to come down to keep close to the shore. Before they had time to reach those above, another canoe shot into sight and was hurried on to the edge of the precipice. It contained but one person-the lad Soudi, who, as he shot by them, cried out: "There is but one God—I am lost, master." The next instant he passed over the falls. The canoe, after having passed the falls, did not sink, but was whirled round and round by the swift current, and was at last swept out of sight behind a neighboring island. The remainder of the canoes succeeded in reaching the camp in safety.

The natives at this point proved very friendly, and exchanged provisions for beads and wire. Having obtained all the provisions that they could conveniently carry, they prepared to start, and on the first of April succeeded in passing round the dangerous falls, when they again went into camp. A great surprise awaited them here. They had scarcely pitched their tents, when to their great surprise Soudi suddenly walked into the camp. It was as though one had indeed risen from the dead, and for a few minutes they could scarcely realize that it was the real Soudi that they beheld, and not his ghost. Great was their joy when the lad assured them that it was himself and not his spirit that they saw.

Swam Ashore.

Seated around their camp they listened to the strange tale that the boy had to tell him. He had been carried over the falls, and when he reached the bottom he was somewhat stunned by the shock, and did not fully recover his senses until the boat struck against a large rock; he then jumped out and swam ashore. He had hardly placed his foot upon the land before he was seized by two men, who bound him hand and foot, and carried him to the top of a large mountain near by. They then stripped him, and examined him with great curiosity. On the day following, a large number of the tribe who dwelt upon the mountain came to see him, and among them was one who had previously visited Stanley's camp, and knew that Soudi was attached to his force.

He told them great stories about Stanley, how terrible he was, and what strange arms he carried, which were so arranged that they could be fired all day without stopping, and ended by telling them that if they wished to escape his fury, they had better return the boy to the place from which they had taken him. Terrified by such tales, these men at once carried Soudi to the place where they had found him, and after having told him to speak a good word for them to his master, departed.

He at once swam across the stream, stopping occasionally upon the rocks to rest, and succeeded at last in reaching the camp soon after it had been established. His captors, however, did not return to their people as he had supposed, but crossing the river at a point lower down, they soon after arrived at the camp and attached themselves to Stanley's force.

Singular Mishap.

The dangers attending Stanley constantly in this great journey from sea to sea are strikingly illustrated by a mishap which befell one of his men in that part of the tour we are now describing.

At one point there were many islands in the river, which often afforded Stanley refuge when attacked by the murderous natives. They appeared very beautiful, but the travellers could not enjoy their beauty, so frequent were the attacks made upon them. Stanley visited several villages, in which he says he found human bones scattered about, just as we would throw away oyster shells after we had removed the bivalves. Such sights as this did not tend to place the men in the most agreeable state of mind, for it seemed to them just as if they were doomed to a similar fate.

On the following day they began to make preparations for passing the rapids which lay below them. In order to do this, he must first drive back the savages which lined the shore. Landing with thirty-six men, he succeeded in doing so, after which he was able to cut a passage three miles long around the falls. Stations were established at different points along the route, and before daylight the canoes were safely carried to the first of these.

Hard Travelling.

The savages then made an attack upon them, but were beaten off. At night the boats were carried to the next station, and the one following to the next, and so on, until at the end of seventy-eight hours of constant labor, and almost unceasing fighting, they reached the river. But they had gone but a short distance, when they found that just before them were a series of rapids extending two miles. These being much smaller than those they had passed before, an attempt was made to float the boats down them.

Six canoes passed the falls in safety, but the seventh was upset. One of the persons in it was a negro named Zaidi, who, instead of swimming to the shore as the others did, clung to the boat and was hurried on to the cataract below him. The canoe did not, however, pass immediately over, but striking a rock which stood upon the very edge of the falls, it was split, one part passing over, while the other was jammed against the rock. To this Zaidi clung in terror, while the waves dashed angrily around him.

Instead of attempting to render assistance to the endangered man, the natives stood upon the shore and howled most unmercifully, and at last sent for Stanley. The latter at once set them at

work making a rattan rope, by which he proposed to let a boat down to the man, into which he could get and be pulled ashore.

But the rope proved too weak, and was soon snapped in twain and the boat carried over the falls. Other and stouter ropes were then laid up, three pieces of which were fastened to a canoe. But it was useless to send the boat out without some one to guide it to the place where Zaidi was, and Stanley looked about for volunteers. No one seemed inclined to undertake the dangerous job, until the brave Uledi quietly said, "I will go." And he did. Two of the cables attached to the boat were held by men on the shore, while the third was to be used to enable the poor wretch upon the rock to reach the boat. Several efforts were made to place it within his reach, but each in turn failed.

Over the Falls.

At last, however, he grasped it, and orders were given for the boat to be pulled ashore. No sooner were the cables tightened than they snapped like small cords, and Zaidi was carried over the falls; but holding on to the rope, he pulled the boat against the rock, in which position it became wedged. Uledi pulled him up and assisted him into the boat, when they both scrambled upon the rock. A rope was thrown to them, but failed to reached the spot where they were.

This was repeated several times, until at last they succeeded in catching it. A heavy rope was then tied to it, which the men drew towards them and fastened to the rock, and thus communication was established between those upon the rock and those upon the shore.

By this time darkness shut in upon them, and they were forced to leave the men upon their wild perch, and wait for another day before attempting to get them off. The next day they succeeded in drawing them both to the shore.

Lost in the Whirlpool.

On June 3d another accident occurred at Masassa whirlpool, which was more deplorable than all the others. Frank Pocock, who had been Stanley's mainstay and next in command to himself, attempted to shoot the rapids against the advice of his experienced boatman, Uledi, who was the bravest native connected with the expedition, though a Zanzibar freedman.

Pocock was warned of the danger of such an undertaking, but with a rashness quite unlike himself he ordered the canoe pushed out into the stream. As they approached nearer and nearer the mad breakers Frank realized his peril, but it was too late. They were soon caught in the dreadful whirl of waters and sucked under with a mighty force sufficient to swallow up a ship. Pocock was an expert swimmer, but his art did not now avail him, for he was swept away to his death, though his eight companions saved themselves.

The dreadful news was borne to Stanley by the brave Uledi. This last and greatest calamity, coming in the midst of his already heavy weight of woe, so overcame the great explorer that he wept bitter tears of anguish.

"My brave, honest, kindly-natured Frank," he exclaimed, "have you left me so? Oh, my long-tried friend, what fatal rashness! Ah, Uledi, had you but saved him, I should have made you a rich man."

Of the three brave boys who sailed away from England with Stanley to win the laurels of discovery in the unknown wilds of Africa, not one was left, but all were now slumbering for eternity, in that strange land, where the tears of sorrowing friends and relatives could never moisten their rude beds of earth.

The descent by river had cost Stanley Pocock, many of the natives, 18,-000 dollars worth of ivory, twelve canoes, and a mutiny, not to mention grave anxiety and incessant cares and conflicts. After a weary time, nearly starved, the remainder of the expedition, reduced to 115 persons, sent on to Embomma a message for help and food. The letter was as follows:

"VILLAGE NSANDA,
August 4th, 1877.
"To any gentleman who speaks
English at Embomma,

"DEAR SIR :- I have arrived at this place from Zanzibar with one hundred and fifteen souls, men, women and children. We are now in a state of imminent starvation. We can buy nothing from the natives, for they laugh at our kinds of cloth, beads and wire. There are no provisions in the country that may be purchased except on marketdays, and starving people cannot afford to wait for these markets. therefore made bold to despatch three of my young men, natives of Zanzibar, with a boy named Robert Fergui, of the English mission at Zanzibar, with this letter, craving relief from you.

"I do not know you, but I am told there is an Englishman at Embomma, and as you are a Christian and a gentleman, I beg of you not to disregard

my request. The boy Robert will be better able to describe our condition than I can tell you in a letter. We are in a state of great distress, but, if your supplies arrive in time, I may be able to reach Embomma in four days. I want three hundred cloths, each four yards long, of such quality as you trade with, which is very different from that we have; but better than all would be ten or fifteen man-loads of rice or grain to fill their pinched bellies immediately, as even with the cloths it would require time to purchase food, and starving men cannot wait.

Must Have Supplies.

"The supplies must arrive within two days, or I may have a fearful time of it among the dying. Of course I hold myself responsible for any expense you may incur in this business. What is wanted is immediate relief, and I pray you to use your utmost energies to forward it at once. For myself, if you have such little luxuries as tea, coffee, sugar and biscuit by you, such as one man can easily carry, I beg you, on my own behalf, that you will send a small supply, and add to the great debt of gratitude due to you upon the the timely arrival of supplies for my people. Until that time, I beg you to believe me

"Yours sincerely,
"H. M. STANLEY,

"Commanding Anglo-American Expe-"dition for Exploration of Africa.

"P. S.—You may not know my name; I therefore add, I am the person that discovered Livingstone.

"H. M. S.."

When the letter was finished, Stanley gathered his men around him, and told them that he intended to send to Embomma for food, and desired to know who among them would go with the guides and carry the letter. No sooner had he asked the question, than Uledi sprang forward, exclaiming, "O, master, I am ready!" Other men also volunteered, and on the next day they set out with the guides.

Deserted by the Guides.

Before they had got half way, the guides left them, and they had to find their way as best they could. Passing along the banks of the Congo, they reached the village soon after sunset, and delivered the letter into the hands of a kindly disposed person. For thirty hours the messengers had not tasted food, but they were now abundantly supplied. On the following morning—it was the 6th of August—they started to return, accompanied by carriers who bore provisions for the half-starving men, women, and children, with Stanley.

Meanwhile, he and his weary party were pushing on as fast as their tired and wasted forms would let them. At nine o'clock in the morning they stopped to rest. While in this situation, an Arab boy suddenly sprang from his seat upon the grass, and shouted:

"I see Uledi coming down the hill!"
Such was indeed the fact, and as the jaded men wearily turned their eyes to the hill, half expecting to be deceived, they beheld Uledi and Kacheche running down the hill, followed by carriers loaded with provisions. It was a glad sight to them, and with one accord they shouted: "La il Allah, il Allah!"

("We are saved, thank God!") Uledi was the first to reach the camp, and at once delivered a letter to his master.

Thanks for Supplies.

By the time Stanley had finished reading it, the carriers arrived with the provisions, and need we say that those half-starved people did them justice? Deeply grateful for the substantial answer to his letter, he immediately penned another, acknowledging their safe arrival. The letter ran as follows:

"DEAR SIRS:-Though strangers I feel we shall be great friends, and it will be the study of my lifetime to remember my feelings of gratefulness when I first caught sight of your supplies, and my poor faithful and brave people cried out, 'Master, we are saved -food is coming!' The old and the young men, the women and the children lifted their wearied and worn-out frames and began lustily to chant an extemporaneous song in honor of the white people by the great salt sea (the Atlantic), who had listened to their prayers. I had to rush to my tent to hide the tears that would come, despite all my attempts at composure.

"Gentlemen, that the blessing of God may attend your footsteps, whithersoever you go, is the very earnest prayer of

"Yours faithfully,

"HENRY M. STANLEY."

It was a daring undertaking—that of marching from one ocean to the other through the wilds of Africa—but it was done. The great feat was accomplished. The magnificent miracle was performed. Heroism and self-sacrifice had their sublime triumph. Perils and hardships beset the expedition from first to last.

Mr. Stanley's own words can best describe them.

"On all sides," he says, "death stared us in the face; cruel eyes watched us by day and by night, and a thousand bloody hands were ready to take advantage of the least opportunity. We defended ourselves like men who knew that pusillanimity would be our ruin among savages to whom mercy is a thing unknown. I wished, naturally, that it might have been otherwise, and looked anxiously and keenly for any sign of forbearance or peace. My anxiety throughout was so constant, and the effects of it, physically and otherwise, have been such, that I now find myself an old man at thirtyfive."

Had Seen Hard Service.

As if to give force to this last statement, the President of the American Geographical Society said: "It will be remembered that when we saw Mr. Stanley here in the Society, his hair was black; it is now said to be nearly white. Of the 350 men with whom he left Zanzibar in 1874, but 115 reached the Atlantic coast, and 60 of those, when at the journey's end, were suffering from dysentery, scurvy and dropsy. He was on the Congo from November 1, 1876, to August 11, 1877—a period of over nine months; so that his promise to the native followers was fulfilled that he would reach the sea before the close of the year."

The historic Nile gave up the mystery of its source, and the Congo was no longer a puzzle, baffling the exploits of modern exploration.

Stanley showed that the Lualaba is the Congo, and opened up a splendid

water-way into the interior of the Dark Continent, which the International Association had already fixed upon, and which rival explorers discussed with more or less acrimony. Stanley put together the puzzle of which Burton, Speke, Livingstone, Baker, Du Chaillu, and Cameron provided pieces, and made the greatest geographical discovery of the century—and of many centuries. We cannot limit the results which will accrue from this feat of Henry M. Stanley in crossing the Dark Continent, over which he shed the light of civilization.

Public Honors.

Stanley was received with great ceremony in England, and almost every nation hastened to bestow its honors upon him. But among them all he singled out one, concerning which he said: "For another honor I have to express my thanks—one which I may be pardoned for regarding as more precious than all the rest. The Government of the United States has crowned my success with its official approval, and the unanimous vote of thanks passed in both houses of Congress, has made me proud for the life of the expedition and its success."

Towards the end of 1886 Stanley was summoned from America to take command of the expedition for the relief of Emin Pasha, the great German explorer, who was lost in the wilds of Africa. On February 22, 1887, he arrived at Zanzibar; on the 25th he, his officers and the Zanzibar porters, Somalis and Soudanese soldiers sailed for the mouth of the Congo, where they landed on the 18th of March. On June 15th the expedition had reached the village of Yambuya, 1300 miles from the sea,

on the left bank of the Aruwimi, 96 miles above its confluence with the Congo.

Here Stanley divided his forces. He left at Yambuya camp a large number of loads, which were to be brought on as soon as porters were provided by the Arab traveller and merchantman, Tipotipo. The entire force which left Zanzibar numbered, all told, 706 men. Between Zanzibar, and Yambuya it was reduced to 649. Of this number 389, including Stanley and five Europeans, made up the advance force, the garrison at Yambuya numbered 129, and a contingent 131 strong was shortly to join the Yambuyan camp from Bolobo.

Major Barttelot was left in command of the rear column, and on June 28th Stanley set out on his forced march through the forest. It is impossible to follow here in detail the story of Stanley's indomitable struggle with almost insurmountable cobstacles. Disaster overtook the rear column; its leader, Major Barttelot, was assassinated; Jameson, the next in command, died of fever, and Bonny alone remained at the camp. For many months no news of Stanley reached Europe; then came rumors of disaster; and finally the news that

Emin and Stanley had joined hands on the shores of the Albert Nyanza.

The return journey was made by an overland route to the east coast, and Bagamoyo was reached on December 4, 1889. Apart from the main object of Stanley's journey this expedition established the existence of a vast tropical forest to the west of the lake country, and occupying the northern portion of the Congo basin.

In 1890 Stanley, after recruiting his health in Egypt and the South of France, returned to London and met with a reception almost royal in its splendor. He was everywhere feasted and feted. The Royal Geographical Society bestowed on him a special gold medal, and replicas were also presented to his officers on the Emin Relief Expedition; and Oxford, Cambridge, Edinburg and Durham conferred on him honorary degrees.

This is one of the most celebrated expeditions on record. We now have on the map of Africa what is known as the Congo Free State, a name that did not exist before the discoveries of Stanley. His achievements in the dark continent form one of the most interesting, romantic and heroic chapters in the annals of exploration.

CHAPTER XX.

Travels and Adventures of Vambery in Central Asia.

HIS distinguished traveller is a native of Hungary. Impelled by the desire of ascertaining the relation of his native language to the Turco-Tartarian tongues, he went first to Constantinople, whence, after several years' residence, he set out for Samarcand, the capital of the famous conqueror, Timour.

Teheran, the modern capital of Persia, was reached in the middle of July, 1862, but, owing to the war having commenced between Dost Mohammed and Ahmed Khan, the ruler of Herat, he did not leave that city until the end of the following March. As a means of more readily accomplishing the objects of his journey, he assumed the character of a dervish, or mendicant pilgrim, on his way to the shrines of Moslem saints. This character his acquaintance with Oriental languages, and with Mahomedan manners and customs, qualified him to assume without much fear of detection; and thus it was that he left Teheran in company with more than a score of Tartar pilgrims, a motly group of merchants, artisans, soldiers, and beggars, some mounted on asses, others trudging on foot, and mostly attired in the ragged garb of mendicancy.

Taking a north-easterly course, up the slopes of the Elburz mountains, the travellers entered the great defile of Mazendran, from which they looked down upon the primæval forests of the brightest verdure

From this defile they entered upon the causeway made by Shah Abbas, but now fast decaying, resting at night in the midst of a beautiful forest of box. Next day they reached Sari, the chief town of Mazendran, and surrounded by groves of orange and lemon trees, the brightly-tinted fruit of which presented a charming contrast to their dark green foliage. Here they had to hire horses for a day's journey through the marshes between the woods and the shores of the Caspian Sea, on which they were to voyage in a small coasting vessel to Gomushtepe, a Turcoman village at the western extremity of Alexander's wall, which, according to the dwellers in that region, was built by genii at the Macedonian conqueror's command.

The pilgrims lingered three weeks in this place, much against the inclination of Vambery, and then continued their journey in a north-easterly direction, all now riding camels or mules. Their way lay at first over grassy plains and through marshes, covered with tall reeds, which swarmed with wild hogs.

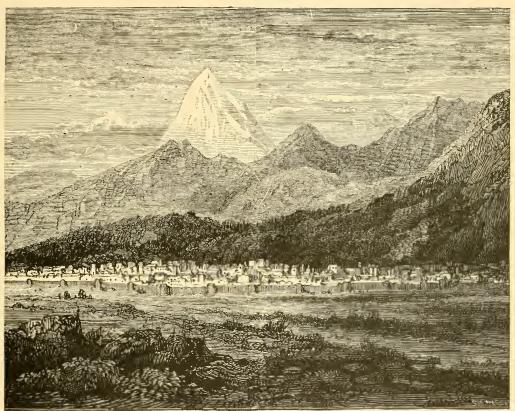
The Persian mountains had now disappeared, and all around them, as far as they could see, stretched verdant plains, dotted here and there with a few tents, near which camels were grazing. The verdure ceased, and they found themselves entering upon the saltmarsh through which the Etrek pursues its sluggish course to the Caspian.

To avoid other marshes, formed by

the overflowing of the river, they had to follow a zigzag course, for the most part over a sandy tract, on which very few tents were visible. Crossing the Etrek with some difficulty, owing to the softness of the bottom and its flooded banks, they held a northward

them in ruins. Some other ruins were seen on the northern summit of Korentaghi, but were passed in the night.

On the night of the 19th the caravan was for a time in a position of great peril. They were approaching the Little Balkan ridge, at the foot of which



VIEW OF TEHERAN—CAPITAL OF PERSIA

course over a trackless waste, guided during the day by the sun and at night by the pole-star.

On the 16th of May the mountainous ridge called the Korentaghi was discernible in a north-easterly direction, and they passed the ruins known as the Mesheni Misryan, which Vambery visited on the following day, and found to be an ancient fortress, consisting of a square keep, and four towers, two of

are many dangerous salt-marshes, which are not distinguishable from the firm ground in their vicinity, owing to a layer of salt which everywhere covers the surface. Warned by the stopping of the camels, all sprang down, and found the ground quaking and yielding beneath them. Fear rendered every one motionless until daybreak, when they slowly and carefully effected a retrograde movement, reaching the foot

of the hills about ten o'clock next morning.

Along the foot of these hills they journeyed until the evening of the 21st, when they reached the Great Balkan. "The spot where we encamped," says Vambery, "was not without its charms; for, as the setting sun projected its rays upon the lovely valleys of the Little Balkan, one could almost fancy oneself actually in a mountainous district. The view might even be characterized as beautiful; but there is the idea of a fearful desolation, the immense abandonment which covers the whole, as it were, with a veil of mourning."

The Route Lost.

On the following night about twelve o'clock, just as they came upon a steep declivity, the guide gave the word for all to dismount, as they were entering the ancient bed of Oxus, and the storms and rains of the preceding winter had washed away all traces of the route, which had been tolerably well defined during the summer. Crossing the old course of the river in a crooked line, in order to find a way out on the opposite side, they succeeded by daybreak in clambering out upon the plateau beyond.

The pilgrims were at this time suffering much from thirst, the springs which they found having dwindled to little pools of turbid and brackish water. On the morning of the 24th they had reached the extremity of the sandy waste over which they had been toiling, and had their hopes of soon meeting with drinkable water encouraged by coming upon numerous footprints of gazelles and wild asses. Some little pools of rain-water were presently krullah Bey, whom he had seen several

reached, and from this spot all the way to Khiva the water-skins of the pilgrims were always full.

They were now at the foot of the plateau of Kaflankir, which rises like an island out of a sea of sand, the deep trench at its base, which the Turcomans told Vambery was the ancient channel of the Oxus, forming the boundary on that side of the Khanate of Khiva. On this plateau the travellers observed gazelles and wild asses grazing in large herds. About noon on the second day they were on it, a great cloud of dust was seen towards the north, and the Turcoman escort stood to their arms, apprehensive of an attack.

Nearer and nearer came the dustcloud, as if raised by a charging squadron of cavalry. Hundreds of hoofs were clattering over the plateau. Presently the sound ceased suddenly, as if the troop had halted; the cloud rolled away, and an immense herd of wild asses was seen drawn up in line. For a few moments they gazed intently at the cavalcade, and then galloped away.

Warm Reception.

Ozbeg villages now succeeded to the brown tents of the wandering tribe of the desert, and on the 2d of June the domes and minarets of Khiva were before them, rising above gardens, and cultivated fields, and groves of poplars. Vambery entered this town with his nerves strung to their extremest tension, for he had heard that the Khan condemned to slavery all suspected strangers. He relied much, however, on his knowledge of all the Khivites of distinction who had been in Constantinople, and especially of one, Shutimes at the house of Ali Pacha, sometime Minister of Foreign Affairs.

To Shukrullah Bey he accordingly at once proceeded, introducing himself as an Effendi who had made the Bey's acquaintance in Constantinople, and desired to offer respects in passing. The Bey, though surprised, made eager inquiries concerning his numerous friends in the Ottoman capital, and the events which had occurred since he had left that city. Vambery answered all his questions with the utmost readiness, and, as he had anticipated, received next day a present and invitation from the Khan.

He found that potenate sitting on a dais in the hall of audience, with his right hand holding a golden sceptre and his left resting on a velvet cushion. The interview was satisfactory to both, and at its termination the Khan wished Vambery to accept a purse of twenty ducats and an ass for his further journey; and on the money being declined, on the ground that dervishes are vowed to poverty, his highness insisted upon his visitor becoming his guest during his brief stay in his capital.

A Fertile Country.

Our traveller did not linger long in Khiva, for the heat was growing oppressive, and he wished to push on to Bokhara before it became intolerable. He now rode the ass presented to him by the Khan, and employed the camel to carry provisions, with which he was now well supplied. The route pursued by the caravan until the Oxus was reached was through a fertile and well-cultivated country, with mulberry trees bordering the road, and their berries within reach of the traveller who rode in their shade.

Flood-water rendered the Oxus so wide that the farther bank was almost indistinguishable. Owing to this extent of water, the passage occupied from ten in the morning until sunset. though the river proper was crossed in half an hour. After passing over a few miles of tolerably well cultivated land they entered upon a sandy tract, through which they pursued a south-easterly course along the right bank of the river. Here and there they came upon a few Khirgis tents, at which they were always sure of a draught of water or milk, which the dust and the intense heat must have rendered very acceptable.

Pleasant News.

On the fifth day of their journey along the banks of the Oxus, which are almost everywhere overgrown with willows, rushes, and tall sedges, they met five horsemen, merchants returning from Bokhara to Khiva, and learned from them the pleasing intelligence that the route was quite safe. This communication set their minds at ease, for they had heard on leaving Khiva that the Tekke Turcomans, taking advantage of the absence of the Emir and his army from Bokhara, were infesting the approaches to that city.

Their agreeable reflections on this score were disturbed soon after daybreak; next day, however, by meeting two men, who informed them that they had been robbed of their boots, their provisions, and most of their clothing, by a band of Tekke Turcomans, numbering about a hundred and fifty. Their Afghan guide, who had been twice robbed, and narrowly escaped with his life, immediately gave the word to retreat, which was done with as much speed

as was possible with heavily-laden camels.

Having reached their last restingplace—the ruins of an ancient fortress on a green hill overlooking the Oxus they allowed the camels three hours' rest and pasture, while filling their water-skins, and then struck into the desert, which seemed their only chance of evading the plundering Tekke. was sunset when they left the ruins, and a few stars were visible when they reached the desert; but the moon had not yet risen to betray them to the keen sight of the robber horde, and they pursued their way in silence, the feet of the camels treading almost noiselessly upon the fine sand.

A Suggestive Name.

The night passed without an alarm. "Our morning station," says Vambery, "bore the charming appellation of Adamkyrylgan (which means 'the place where men perish'), and one needed only to cast a look at the horizon to convince himself how appropriate is that name. Let the reader picture to himself a sea of sand, extending as far as eve can reach, on one side formed into hills, like waves, lashed into that position by the furious storm, on the other side, again, like the smooth waters of a still lake, merely rippled by the west wind. Not a bird visible in the air, not a worm or beetle upon the earth; traces of nothing but departed life, in the bleaching bones of man or beast that has perished, collected by every passer-by in a heap, to guide the march of future travellers."

They were now obliged, notwithstanding the heat and dust, to use their water sparingly, and they began to suf-

fer the tortures of thirst. Two of the camels died, two of the pilgrims became exhausted, and had to be bound at length upon their camels, and on the fourth day one of the sufferers died. So slow was their progress that they were not beyond the desert. And now, with the mountains in sight, the hot wind and the sand-cloud came, and they had to dismount in haste, and lie prostrate behind the camels, which fell on their knees, and strove to bury their heads in the sand. The dust-storm passed over them, and left them covered with a thick crust of hot sand.

Scarcity of Water.

Towards evening they reached a spring, but its water was undrinkable, and at midnight they started again, fevered and feeble, and scarcely able to move. Vambery slept from exhaustion, and found himself in the morning in a hut, surrounded by men, whom he found to be Persian slaves, sent from Bokhara by their masters to tend sheep. By them, poor as they were, he and his companions were hospitably and kindly treated.

"I was much touched," he relates, "to see amongst them a child five years old, also a slave, of great intelligence. He had been, two years before, captured and sold with his father. When I questioned him about the latter, he answered me confidingly, 'Yes; my father has bought himself (meaning paid his own ransom); at longest I shall only be a slave two years, for by that time my father will have spared the necessary money.' The poor child had on him hardly anything but a few rags, to cover his weak little body; his skin was of the hardness and color of

leatner. I gave him one of my own articles of attire, and he promised to have a dress made out of it for himself."

Leaving these unhappy slaves with mingled feelings of compassion for

fear of robbers, hot winds, and empty water-skins."

Their next station was a village called Khakemir, in the midst of a tolerably well-cultivated country, the whole dis-



DERVISHES AT PRAYER.

their condition and thankfulness for their kindness, our travellers started with the intention of making their next station at Khodja Oban, a place to which pilgrims resort to visit the grave of a Moslem saint; but they lost their way at night among the sand hills, and found themselves at daybreak on the margin of a lake. They were now on the borders of Bokhara, and free from

trict being watered by canals connected with the river Zereshan. This was crossed next day at a ford, though the remains of a stone bridge were visible on the farther side, near the ruins of a palace said to have been built by the renowned Abdullah Khan Sheibani. The city of Bokhara was now before them, its walls broken in many places, and its buildings presenting no traces

of its former grandeur, though it is still vaunted by Bokhariots as the capital of Central Asia.

Vambery says the wretchedness of the streets and houses far exceed that of the meanest in Persian cities, and the dust, a foot deep, give a poor idea of "noble Bokhara," as the inhabitants call it; the only thing which impressed him being the strange and diversified mix ture of races and costumes, which present a striking spectacle to the eyes of a stranger.

Vambery was well lodged here, and had access to the best society; but the task of maintaining his assumed character was a difficult one, and it is probable that only the sanctity supposed to attach to that character guarded his secret. He believed that he was suspected, and that many devices were resorted to with the view of causing him to betray himself.

Strange Traveller.

"One day," he says, "a servant of the Vizier brought to me a little shrivelled individual, that I might examine him, to see whether he was, as he pretended, really an Arab from Damascus. When he first entered, his features struck me much—they appeared to me European. When he opened his mouth, my astonishment and perplexity increased, for I found his pronunciation anything rather than that of an Arab. He told me that he had undertaken a pilgrimage to the tomb of Djasen Ben Sadik, at Khoten, in China, and wanted to proceed on his journey that very day. His features during our conversation betrayed visible embarrassment, and it was a subject of great regret to me that I had not an occasion to see him a

second time, for I am strongly disposed to think that he was playing a part similar to my own."

Some of the pilgrims being left in Bokhara, the caravan was reduced on leaving that city to the occupants of a couple of carts of very primitive construction, in which they were jolted in a most unpleasant manner, as the wheels—far from perfect circles—rolled through the deep sand or mud.

Shut Out of the City.

Night was chosen for starting, and as the driver was not familiar with the road he mistook the way, and it was morning when the little town of Mezar was reached. The journey was resumed, therefore, after a brief halt, through a fertile and well-cultivated country, more refreshing to the eye than anything the travellers had seen since they had left the Pontos mountains behind them.

Next morning they reached Kette Kurgan, where there is a fortress defended by a strong wall and a deep trench, and, the sun having set, the gates were closed, and they had to lodge at a caravanserai outside the walls. Samarcand was reached on the sixth day, and the first impression made by its domes and minarets, brightened by the sunbeams, and brought into relief by a background of groves and gardens, was very pleasing. Of this ancient city to which so much historical interest attaches, Vambery says that "although it equals Teheran in circumference, its houses do not lie so close together; still, the prominent buildings and ruins offer a far more magnificent prospect. eye is most struck by four lofty edifices, in the form of half-domes, the fronts of the Medresses (colleges).

"As we advance, we perceive first a small neat dome, and further to the south a larger and more imposing one; the former is the tomb, the latter the mosque, of Timour. Quite facing us, on the south-westerly limit of the city, on a hill, rises the citadel, round which other mosques and tombs are grouped. If we suppose the whole intermixed with closely-planted gardens, we have a faint idea of Samarcand."

Dazzling Splendor.

Like all eastern cities, this "focus of the whole globe," as a Persian poet calls it, shows best at a distance; but many of its antiquities are interesting even to Europeans. The summer palace of Timour retains much of its ancient splendor, being approached by an ascent of forty broad marble steps, and containing apartments with mosaic floors, the colors of which are as brilliant as if they had been executed by the present generation of workmen. Three flags, a breastplate, and an old sword, doubtful relics of the great Emir, were shown to our traveller by the custodian.

The mosque of Timour has a melonshaped dome, and is rich in decorations of colored bricks and inscriptions from the Koran in gold letters. The mosque of Shah Zindel exhibits similar mural decorations, but they are defaced in many places, and the arched gateway shows the ravages of time in its broken brickwork. The citadel contains the reception-hall of Timour, with the celebrated green stone upon which the conquering Emir had his throne placed.

The tomb of Timour consists of a neat chapel, surmounted by a splendid central dome and two smaller ones, and surrounded by a wall, in which is a high arched gate. The tomb is under the central dome, and is covered with a flat dark-green stone. The walls of the chapel are covered internally with alabaster, decorated with arabesque designs in blue and gold.

The Emir's Parade.

Vambery was preparing for his departure from Samarcand, where he stayed only eight days, when the Emir, returning from his victorious campaign in Khokand, made his triumphal entry into the city. There was a great crowd, but no particular pomp was displayed. Two hundred horsemen rode first, and were followed by infantry, with flags and drums.

"The Emir and all his escort," says our traveller, "looked, with their snowwhite turbans and wide silk garments of all the colors of the rainbow, more like the chorus of women in the opera of 'Nebuchadnezzar' than a troop of Tartar warriors. So also it may be said with respect to other officers of the Court, of whom some bore white staves and others halbreds, that there was in the whole procession nothing to remind one of Turkestan, except in the followers, of whom many were Kiptchaks, and attracted attention by their Mongol features and the arms which they bore consisting of bows, arrows, and shields."

The Emir held a public audience on the following day, and Vambery presented himself, sustaining his wellassumed character of a Mohamedan pilgrim with his usual address, and again with success. He was advised by his friends, however, to quit Samarcand with all speed, and gain as quickly as possible the farther bank of the Oxus. He left the city by night, but travelled slowly, on account of the heat, passing through a well-cultivated country, in a south-westerly direction; Herat, of which so much has been heard of late in connection with events in Afghanistan, being the next goal.

Karshi, a town of considerable size and commercial importance, was reached on the third day, and our traveller was surprised to find there a public garden, with flower-beds and tea-stalls, on a scale which he had not found in Bokhara or Samarcand, or even in Persia. He remained there three days, and at sunrise on the second day of the resumed journey reached the Oxus, on the nearer bank of which stands a small fort, and on the opposite side, on a steep hill, the citadel, around which is spread the frontier town of Kerki.

"Mother of Cities."

Having to wait here the arrival of the caravan for Herat, he availed himself of the delay to visit the ruins of ancient Balkh, styled by Oriental writers "the mother of cities." Only a few heaps of earth are pointed out as remains of the ancient Bactra, and of the more modern ruins there is nothing more remarkable than a half-demolished mosque, built by the Seldjoukian Sultan Sandjar in the days when Balkh was the centre of Moslem eivilization.

The caravan in which our traveller turned his back upon the Khanate of Bokhara consisted of four hundred camels, nearly as many asses, and a few horses. Some of the men were pilgrims, others emancipated slaves returning to their native countries. The country traversed was for some distance a barren plain, then, as the north-western frontier of Afghanistan was approached, it became hilly.

A broad valley was threaded, and then a steep mountain pass was traversed, so narrow that the caravan had to wind through it in single file. Thence they descended into a long valley, through which the river Murgab ran swiftly, in crossing which Vambery's ass fell, and precipitated him into the water, amidst the laughter of his companions. The river was not deep, however, and he escaped with no greater mishap than a wetting.

Slow Travelling.

From this ford to Herat is reckoned four days' journey for horses, but camels require double that time, the country being mountainous. It became wilder and more picturesque as the travellers advanced, the ruins of old castles crowning the precipices between which the Murgab pours its foaming stream. Beyond the second pass they left the river, and proceeded in a westerly direction, reaching next day the ruins of the town and fortress of Kale No, the site of which was occupied by a few tents of the Hezare, a tribe of mixed Tartar and Persian descent.

Thence to Herat is twenty miles, but the way lies over lofty mountains, and requires four days for its accomplishment. The highest summit was passed on the second day, and was covered with snow, so that the travellers suffered severely from cold, in spite of the great fires which they made when they halted. Thence they descended a path only a foot wide, along a ledge from which a precipice rose above a deep ravine.

Rounding the shoulder of a mountain, they looked down upon the broad and fertile plains in which Herat stands, dotted with villages, and intersected by numerous canals. Trees only are wanted to complete the charm of the Endscape. The city, having been recently besieged by Dost Mahomed, presented a ruinous appearance.

"The houses which we passed, the advanced works, the very gate," says Vambery, "looked like a heap of rubbish. Near the latter is the citadel, which, from its elevation, served as a mark for the Afghan artillery; it lies there biasted and half-demolished. The doors and windows have been stripped of their woodwork, for during the siege the inhabitants suffered most from the scarcity of fuel. Each step we advance we see greater indications of devastation. Entire quarters of the town remain solitary and abandoned."

Means Exhausted.

Our traveller's resources were by this time exhausted, and he was compelled to sell his ass. He waited upon an envoy sent by the Governor of Khorassan to the young Sirdar of Herat, Yakoub Khan, in the hope of obtaining employment, but without success. His fellow-travellers had dispersed, only one remaining with him—a young man who had become attached to him, and eventually accompanied him to Pesth.

To leave no stone unturned, he waited upon Yakoub Khan—then a lad of fifteen—who seemed to penetrate his secret immediately; for, regarding him for a moment with a look of surprise and perplexity, he raised a finger, and smilingly exclaimed, "I swear you are an Englishman!" Before Vambery could reply, he sprang from his chair, and, clapping his hands, exclaimed, "Pardon me; but you are an Englishman, are you not?" The traveller assumed a grave look, and reminded the young prince of the proverb attributed by tradition to the prophet of Mecca, "He who takes the believer for an unbeliever is himself an unbeliever."

Welcome from the Prince.

This rejoinder disconcerted Yakoub, who resumed his seat, observing in an apologetic tone that he had never before seen a hadji from Bokhara with such a physiognomy. Vambery replied that he was not a Bokhariot, but a Strambouli; and, producing his Turkish passport, mentioned Yakoub's cousin, the son of Akbar Khan, who was in Constantinople in 1860. The prince then spoke very graciously to him, and invited him to repeat his visit as often as he could.

Two days before he left Herat our traveller made an excursion to the village of Gazerghiah, situated on an eminence a league from the city, and containing many memorials of antiquity, dating from the time of Shah Rookh Mirza, a son of Timour. Near the village are the ruins of Mosalla, which were also visited. The remains of the mosque and sepulchre of Sultan Hoosein Mirza, erected 891, displayed a large amount of elaborate carving, many of the stones being covered with inscriptions from the Koran.

On the 15th of November, 1863, Vambery quitted Herat with the great caravan bound for Meshed, and consisting of 2,000 persons, about half of whom

were Hezare pilgrims from Cabul, and a large proportion of the remainder Afghan merchants from that city and



A PERSIAN OFFICIAL.

from Candahar. He obtained permission to ride upon a lightly-loaded camel by representing that he should be able to pay when the caravan reached Meshed; but by this statement he raised doubts of the genuineness of the char-

acter which he had assumed, so far with success.

"The dubious light in which I stood, afforded," he says, "a fund of interesting surmises to those by whom I was surrounded; for whilst some of them took me for a genuine Turk, others were disposed to think me an Englishman; the different parties even quarrelled on the subject, and it was very droll to observe how the latter began to triumph over the former when it was observed that, in proportion as we drew near to Meshed, the bent posture of humility of the dervish began more and more to give way to the upright and independent deportment of the European."

Meshed was reached on the twelfth day after the departure of the caravan from Herat, and there our traveller was hospitably received by Colonel Dolmage, who filled several important offices under Murad Mirza, uncle of the reigning Shah, and governor of the city.

The disguise was now thrown off, and, reflecting that the truth concerning him would become known at Herat on the return of the Afghans who had travelled with him from that city, he wrote to Yakoub Khan, avowing that though not an Englishman, he was a European, and complimenting the young prince on the acuteness which had penetrated his disguise.

For a month he was the honored guest of Colonel Dolmage, and then he set out for Teheran. That city was reached on the 20th of January, 1864, and he proceeded immediately to the Turkish embassy, whence he had started ten months before on his adventurous journey. A suite of apartments was

immediately set apart for him, the British and French ambassadors vied with each other in showing him kindness, and the Shah accorded him a gracious reception. He remained in the Persian capital more than two months, and then set out for Constantinople, via Tabreez and Trebizond.

Vambery's adventurous journey was the most remarkable of any in Central Asia during the century, bringing the outside world into touch with a part of the globe that has remained for ages an almost impenetrable mystery to other countries, and at the same time settling many doubtful questions.

PARTIV. GREAT WARS AND BATTLES

OF THE

NINETEENTH CENTURY.

CHAPTER XXI.

Downfall of Napoleon at Waterloo.

HE great battle which ended the twenty-three years' war of the first French Revolution, and which quelled the extraordinary man whose genius and ambition had so long dominated the world, is justly regarded as one of those remarkable events that appear at long intervals and determine the fate of nations.

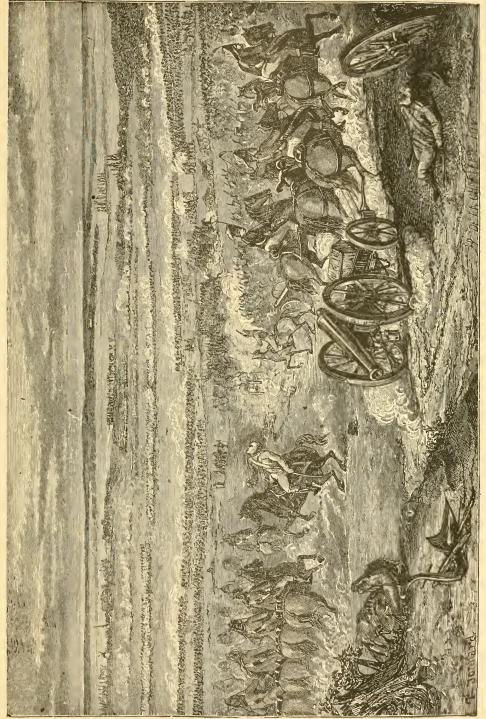
Europe, long tossed by wars and convulsions, at length breathed peacefully. Suddenly Napoleon Bonaparte escaped from Elba and the whole scene was changed as if by the magic of an evil spirit. The exertions which the allied powers made at this crisis to grapple promptly with the French Emperor have truly been termed gigantic, and never were Napoleon's genius and activity more signally displayed than in the celerity and skill by which he brought forward all the military resources of France, which the reverses of the three preceding years, and the pacific policy of the Bourbons during the months of their first restoration, had greatly diminished and disorganized.

He re-entered Paris on the 20th of March, 1815, and by the end of May,

besides sending a force into La Vendee to put down the armed risings of the Royalists in that province, and besides providing troops under Massena and Suchet for the defense of the southern frontiers of France, Napoleon had an army assembled in the northeast for active operations under his own command, which amounted to between 120 and 130,000 men, with a superb park of artillery, and in the highest possible state of equipment, discipline and efficiency.

The approach of the many Russians, Austrians, Bavarians and other foes of the French Emperor to the Rhine was necessarily slow; but the two most active of the allied powers had occupied Belgium with their troops while Napoleon was organizing his forces. Marshal Blucher was there with 116,000 Prussians, and the Duke of Wellington was there also with about 106,000 troops, either British or in British pay.

Napoleon determined to attack these enemies in Belgium. The disparity of numbers was indeed great, but delay was sure to increase the number of his enemies much faster than reinforcements could join his own ranks. He con-



GREAT BATTLE OF WATERLOQ, WHICH WAS WON BY THE ALLIED ARMIES UNDER THE DUKE OF WELLINGTON, AND RESULTED IN THE FINAL OVERTHROW OF NAPOLEON,

sidered also that "the enemy's troops were cantoned under the command of two generals, and composed of nations differing both in interest and in feelings. His own army was under his own sole command. It was composed exclusively of French soldiers, mostly veterans, well acquainted with their officers and with each other, and full of enthusiastic confidence in their commander. If he could separate the Prussians from the British, so as to attack each in detail, he felt sanguine of success, not only against these, the most resolute of his many adversaries, but also against the other masses that were slowly laboring up against his southeastern frontiers.

The French Concealed.

The triple chain of strong fortresses which the French possessed on the Belgian frontier formed a curtain, behind which Napoleon was able to concentrate his army, and to conceal till the very last moment the precise line of attack which he intended to take. On the other hand, Blucher and Wellington were obliged to canton their troops along a line of open country of considerable length, so as to watch for the outbreak of Napoleon from whichever point of his chain of strongholds he should please to make it.

Blucher, with his army, occupied the banks of the Sambre and the Meuse, from Liege on his left, to Charleroi on his right; and the Duke of Wellington covered Brussels, his cantonments being partly in front of that city, and between it and the French frontier, and partly on its west; their extreme right being at Courtray and Tournay, while their left approached Charleroi and

communicated with the Prussian right.

It was upon Charleroi that Napoleon resolved to level his attack, in hopes of severing the two allied armies from each other, and then pursuing his favorite tactic of assailing each separately with a superior force on the battle-field, though the aggregate of their numbers considerably exceeded his own.

Over the Frontier.

On the 15th of June the French army was suddenly in motion, and crossed the frontier in three columns, which were pointed upon Charleroi and its vicinity. The French line of advance upon Brussels, which city Napoleon resolved to occupy, thus lay right through the centre of the line of the cantonments of the allies. The Prussian general rapidly concentrated his forces, calling them in from the left, and the English general concentrated his, calling them in from the right toward the menaced centre of the combined position.

On the morning of the 16th. Blucher was in position at Ligny, to the northeast of Charleroi, with 80,000 men. Wellington's troops were concentrating at Quatre Bras, which lies due north of Charleroi, and is about nine miles from Ligny. On the 16th, Napoleon in person attacked Blucher, and, after a long and obstinate battle, defeated him, and compelled the Prussian army to retire northward toward Wavre. On the same day, Marshal Ney, with a large part of the French army, attacked the English troops at Quatre Bras, and a very severe engagement took place, in which Ney failed in defeating the British, but succeeded in preventing their sending any

help to Blucher, who was being beaten by the Emperor at Ligny.

On the news of Blucher's defeat at Ligny reaching Wellington, he foresaw that the Emperor's army would now be directed upon him, and he accordingly retreated in order to restore his communications with his ally, which would have been dislocated by the Prussians falling back from Ligny to Wavre if the English had remained in advance at Quatre Bras. During the 17th, therefore, Wellington retreated, being pursued, but little molested by the main French army, over about half the space between Quatre Bras and Brussels.

Decides to Give Battle.

This brought him again parallel, on a line running from west to east, with Blucher, who was at Wavre. Having ascertained that the Prussian army, though beaten on the 16th, was not broken, and having received a promise from its general to march to his assistance, Wellington determined to halt, and to give battle to the French Emperor in the position, which, from a village in its neighborhood, has received the ever-memorable name of the field of Waterloo.

When, after a very hard-fought and long-doubtful day, Napoleon had succeeded in driving back the Prussian army from Ligny, and had resolved on marching himself to assail the English, he sent, on the 17th, Marshal Grouchy with 30,000 men to pursue the defeated Prussians, and to prevent their marching to aid the Duke of Wellington. Great recriminations passed afterwards between the marshal and the Emperor as to how this duty was attempted to be performed, and the reasons why

Grouchy failed on the 18th to arrest the lateral movement of the Prussian troops from Wavre toward Waterloo.

It may be sufficient to remark here that Grouchy was not sent in pursuit of Blucher till late on the 17th, and that the force given to him was insufficient to make head against the whole Prussian army; for Blucher's men, though they were beaten back, and suffered severe loss at Ligny, were neither routed nor disheartened; and they were joined at Wavre by a large division of their comrades under General Bulow, who had taken no part in the battle of the 16th, and who were fresh for the march to Waterloo against the French on the 18th.

But the failure of Grouchy was in truth mainly owing to the indomitable heroism of Blucher himself, who, though severely injured in the battle at Ligny, was as energetic and as active as ever in bringing his men into action again, and who had the resolution to expose a part of his army, under Thielman, to be overwhelmed by Grouchy at Wavre on the 18th, while he urged the march of the mass of his troops upon Waterloo. "It is not at Wavre, but at Waterloo," said the old field-marshal, "that the campaign is to be decided;" and he risked a detachment, and won the campaign accordingly.

In Perfect Agreement.

Wellington and Blucher trusted each other as cordially, and co-operated as zealously, as formerly had been the case with Marlborough and Eugene. It was in full reliance on Blucher's promise to join him that the duke stood his ground and fought at Waterloo: and those who have ventured to impugn

the duke's capacity as a general ought to have had common sense enough to perceive that to charge the duke with having won the battle of Waterloo by the help of the Prussians is really to say that he won it by the very means on which he relied, and without the expectation of which the battle would not have been fought.

Wellington Criticized.

Napoleon himself found fault with Wellington for not having retreated beyond Waterloo. The short answer may be, that the duke had reason to expect that his army could singly resist the French at Waterloo until the Prussians came up, and that, on the Prussians joining, there would be a sufficient force, united under himself and Blucher, for completely overwhelming the enemy.

And while Napoleon thus censures his great adversary, he involuntarily bears the highest possible testimony to the military character of the English, and proves decisively of what paramount importance was the battle to which he challenged his fearless opponent. Napoleon asks, "If the English army had been beaten at Waterloo, what would have been the use of those numerous bodies of troops, of Prussians, Austrians, Germans, and Spaniards, which were advancing by forced marches to the Rhine, the Alps, and Pyrenees?"

The reader may gain a generally accurate idea of the localities of the great battle by picturing a valley between two and three miles long, of various breadths at different points, but generally not exceeding half a mile. On each side of the valley there is a wind-

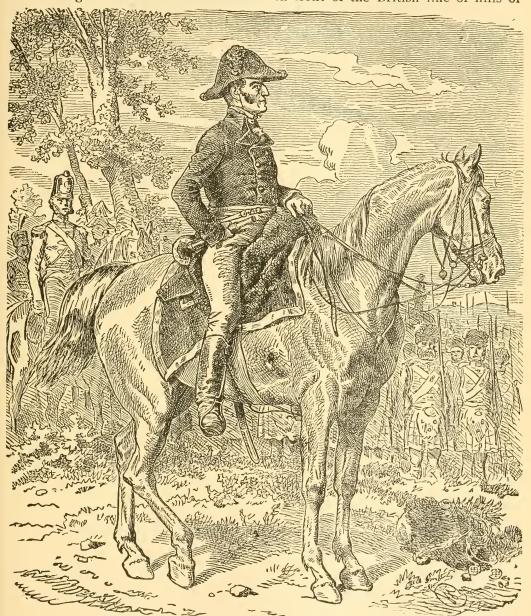
ing chain of low hills, running somewhat parallel with each other. The declivity from each of these ranges of hills to the intervening valley is gentle but not uniform, the undulations of the ground being frequent and considerable. The English army was posted on the northern, and the French army occupied the southern ridge.

The artillery of each side thundered at the other from their respective heights throughout the day, and the charges of horse and foot were made across the valley that has been described. The village of Mont St. Jean is situated a little behind the centre of the northern chain of hills, and the village of La Belle Alliance is close behind the centre of the southern ridge. The high road from Charleroi to Brussels runs through both these villages, and bisects, therefore, both the English and the French positions. The line of this road was the line of Napoleon's intended advance on Brussels.

Advantages of Position.

There are some other local particulars connected with the situation of each army which it is necessary to bear in mind. The strength of the British position did not consist merely in the occupation of a ridge of high ground. A village and ravine, called Merk Braine, on the Duke of Wellington's extreme right, secured him from nis flank being turned on that side; and on his extreme left, two little hamlets, called La Haye and Papillote, gave a similar though a slighter protection. It was, however, less necessary to provide for this extremity of the position, as it was on this (the eastern) side that

Behind the whole British position important to see what posts there were was the great and extensive forest of in front of the British line of hills of



THE DUKE OF WELLINGTON-COMMANDER OF THE ALLIED ARMIES.

the French to turn either of the Eng- to repel or facilitate an attack; and it lish flanks, and the battle was a day of will be seen that there were two, and straightforward fighting; it is chiefly that each was of very great importance.

Soignies. As no attempt was made by | which advantage could be taken either

In front of the British right, that is to say, on the northern slope of the valley toward its western end, there stood an old-fashioned Flemish farm-house called Goumont or Hougoumont, with out-buildings and a garden, and with a copse of beech trees of about two acres in extent round it. This was strongly garrisoned by the allied troops; and while it was in their possession, it was difficult for the enemy to press on and force the British right wing.

Enemy Under Cover.

On the other hand, if the enemy could occupy it, it would be difficult for that wing to keep its ground on the heights, with a strong post held adversely in its immediate front, being one that would give much shelter to the enemy's marksmen, and great facilities for the sudden concentration of attacking columns. Almost immediately in front of the British centre, and not so far down the slope as Hougoumont, there was another farmhouse, of a smaller size, called La Have Sainte, which was also held by the British troops, and the occupation of which was found to be of very serious consequence.

With respect to the French position, the principal feature to be noticed is the village of Planchenoit, which lay a little in the rear of their right (that is, on the eastern side), and which proved to be of great importance in aiding them to check the advance of the Prussians.

As has been already mentioned, the Prussians, on the morning of the 18th, were at Wavre, about twelve miles to the east of the field of battle at Waterloo. The junction of Bulow's division had more than made up for the loss sus-

tained at Ligny; and leaving Thielman, with about 17,000 men, to hold his ground as he best could against the attack which Grouchy was about to make on Wavre, Bulow and Blucher moved with the rest of the Prussians upon Waterloo. It was calculated that they would be there by three o'clock; but the extremely difficult nature of the ground which they had to traverse, rendered worse by the torrents of rain that had just fallen, delayed them long on their twelve miles' march.

The night of the 17th was wet and stormy; and when the dawn of the memorable 18th of June broke, the rain was still descending heavily. The French and British armies rose from their dreary bivouacs and began to form, each on the high ground which it occupied. Toward nine the weather grew clearer, and each army was able to watch the position and arrangements of the other on the opposite side of the valley.

Line of Battle.

The Duke of Wellington drew up his infantry in two lines, the second line being composed principally of Dutch and Belgian troops, whose fidelity was doubtful, and of those regiments of other nations which had suffered most severely at Ouartre Bras on the 16th. This second line was posted on the northern declivity of the hills, so as to be sheltered from the French cannonade. The cavalry was stationed at intervals along the line in the rear, the largest force of horse being collected on the left of the centre, to the east of the Charleroi road. On the opposite heights the French army was drawn up in two general lines, with the entire force of the Imperial Guards, cavalry as well as infantry, in the rear of the centre, as a reserve.

English military critics highly eulogized the admirable arrangement which Napoleon made of his forces of each arm, so as to give him the most ample means of sustaining, by an immediate and sufficient support, any attack, from whatever point he might direct it, and of drawing promptly together a strong force, to resist any attack that might be made on himself in any part of the field. When his troops were all arrayed, he rode along the lines, receiving everywhere the most enthusiastic cheers from his men, of whose entire devotion to him his assurance was now doubly sure. On the southern side of the valley the duke's army was also arrayed, and ready to meet the menaced attack.

Armies Face to Face.

The two armies were now fairly in presence of each other, and their mutual observation was governed by the most intense interest and the most scrutinizing anxiety. In a still greater degree did these feelings actuate their commanders, while watching each other's preparatory movements, and minutely scanning the surface of the arena on which tactical skill, habitual prowess, physical strength, and moral courage were to decide, not alone their own, but, in all probability, the fate of Europe.

Apart from national interests and considerations, and viewed solely in connection with the opposite characters of the two illustrious chiefs, the approaching contest was contemplated with anxious solicitude by the whole military world. Need this create sur-

prise when we reflect that the struggle was one for mastery between the far-famed conqueror of Italy and the victorious liberator of the Peninsule; between the triumphant vanquisher of Eastern Europe, and the bold and successful invader of the south of France! Never was the issue of a single battle looked forward to as involving consequences of such vast importance—of such universal influence.

The Struggle Begins.

It was approaching noon before the action commenced. Napoleon, in his memoirs, gives as the reason for this delay, the miry state of the ground through the heavy rain of the preceding night and day, which rendered it impossible for cavalry or artillery to manœuver on it until a few hours of dry weather had given it its natural consistency. It has been supposed, also, that he trusted to the effect which the sight of the imposing array of his own forces was likely to produce on the part of the allied army.

The Belgian regiments had been tampered with; and Napoleon had well founded hopes of seeing them quit the Duke of Wellington in a body, and range themselves under his own eagles. The duke, however, who knew and did not trust them, had guarded against the risk of this by breaking up the corps of Belgians, and distributing them in separate regiments among troops on whom he could rely.

At last, at about half past eleven o'clock, Napoleon began the battle by directing a powerful force from his left wing under his brother, Prince Jerome, to attack Hougoumont. Column after column of the French now descended

from the west to the southern heights, and assailed that post with fiery valor, which was encountered with the most determined bravery. The French won the copse round the house, but a party of the British Guards held the house itself throughout the day.

Terrific Cannonade.

Amid shell and shot, and the blazing fragments of part of the buildings, this obstinate contest was continued. But still the English held Hougoumont, though the French occasionally moved forward in such numbers as enabled them to surround and mask this post with part of their troops from their left wing, while others pressed onward up the slope, and assailed the British right.

The cannonade, which commenced at first between the British right and the French left, in consequence of the attack on Hougoumout, soon became general along both lines; and about one o'clock Napoleon directed a grand attack to be made under Marshal Ney upon the centre and left wing of the allied army. For this purpose four columns of infantry, amounting to about 18,000 men were collected, supported by a strong division of cavalry under the celebrated Kellerman, and seventyfour guns were brought forward ready to be posted on the ridge of a little undulation of the ground in the interval between the two main ranges of heights, so as to bring their fire to bear on the duke's line at a range of about seven hundred vards.

By the combined assault of these formidable forces, led on by Ney, "the bravest of the brave," Napoleon hoped to force the left centre of the British position, to take La Haye Sainte,

and then, pressing forward, to occupy also the farm of Mont St. Jean. He then could cut the mass of Wellington's troops off from their line of retreat upon Brussels, and from their own left, and also completely sever them from any Prussian troops that might be approaching.

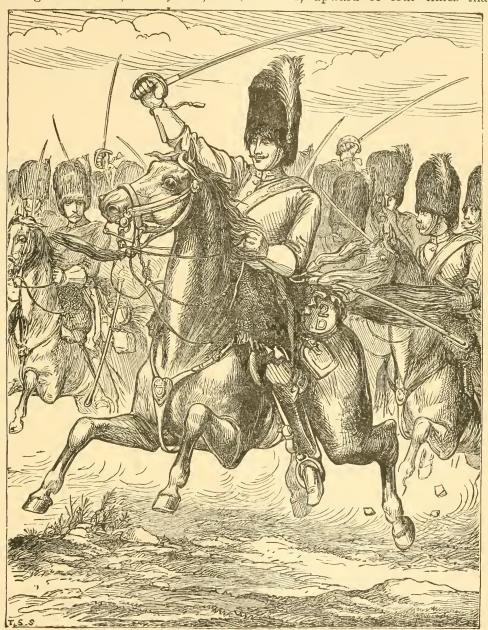
The columns destined for this great and decisive operation descended majestically from the French range of hills, and gained the ridge of the intervening eminence, on which the batteries that supported them were now ranged. As the columns descended again from this eminence, the seventy-four guns opened over their heads with terrible effect upon the troops of the allies that were stationed on the heights to the left of Charleroi road. One of the French columns kept to the east, and attacked the extreme left of the allies; the other three continued to move rapidly forward upon the left centre of the allied position.

Disgraceful Panic.

The front line of the allies here was composed of Bylant's brigade of Dutch and Belgians. As the French columns moved up the southward slope of the height on which the Dutch and Belgians stood, and the skirmishers in advance began to open their fire, Bylant's entire brigade turned and fled in disgraceful and disorderly panic; but there were men more worthy of the name behind.

The second line of the allies here consisted of two brigades of the English infantry, which had suffered severely at Quatre Bras. But they were under Picton, and not even Ney himself surpassed in resolute bravery that stern

and fiery spirit. Picton brought his against the three victorious French two brigades forward, side by side, in a columns, upward of four times that



HEROIC CHARGE OF THE ENGLISH CAVALRY AT WATERLOO.

thin two-deep line. Thus joined to- | strength, and who, encouraged by the gether, they were not 3000 strong. easy rout of the Dutch and Belgians, With these Picton had to make head now came confidently over the ridge.

The British infantry stood firm; and as the French halted and began to deploy into line, Picton seized the critical moment: a close and deadly volley was thrown in upon them, and then with a fierce hurrali the British dashed in with the bayonet. French reeled back in confusion; and as they staggard down the hill, a brigade of the English cavalry rode in on them, cutting them down by whole battalions, and taking 2000 prisoners. The British cavalry galloped forward and sabred the artillery-men of Nev's seventy-four advanced guns; and then cutting the traces and the throats of the horses, rendered these guns totally useless to the French throughout the remainder of the day. In the excitement of success, the English cavalry continued to press on, but were charged in their turn, and driven back with severe loss by Milhaud's cuirassiers.

Failure of Great Attack.

This great attack (in repelling which the brave Picton had fallen) had now completely failed; and, at the same time, a powerful body of French cuirassiers, who were advancing along the right of the Charleroi road, had been fairly beaten after a close hand-to-hand fight by the heavy cavalry of the English household brigade. Hougoumont was still being assailed, and was successfully resisting.

Troops were now beginning to appear at the edge of the horizon on Napoleon's right, which he too well knew to be Prussian, though he endeavored to persuade his followers that they were Grouchy's men coming to aid them. It was now about half-past three o'clock; and though Wellington's

army had suffered severely by the unremitting cannonade and in the late desperate encounter, no part of the British position had been forced. Napoleon next determined to try what effect he could produce on the British centre and right by charges of his splendid cavalry, brought on in such force that the duke's cavalry could not check them.

Stood Like a Wall.

Fresh troops were at the same time sent to assail La Haye Sainte and Hougoumont, the possession of these posts being the emperor's unceasing object. Squadron after squadron of the French cuirassiers accordingly ascended the slopes on the duke's right, and rode forward with dauntless courage against the batteries of the British artillery in that part of the field. artillerymen were driven from their guns, and the cuirassiers cheered loudly at their supposed triumph. But the duke had formed his infantry in squares, and the cuirassiers charged in vain against the impenetrable hedges of bayonets, while the fire from the inner ranks of the squares told with terrible effect on their squadrons.

Time after time they rode forward with invariably the same result; and as they receded from each attack, the British artillerymen rushed forward from the centres of the squares, where they had taken refuge, and plied their guns on the retiring horsemen. Nearly the whole of Napoleon's magnificent body of heavy cavalry was destroyed in these fruitless attempts upon the British right. But in another part of the field fortune favored him for a time. Donzelot's infantry took La Haye Sainte between six and seven o'clock,

and the means were now given for organizing another formidable attack on the centre of the allies.

There was no time to be lost: Blucher and Bulow were beginning to press upon the French right; as early as five o'clock, Napoleon had been obliged to detach Lobau's infantry and Domont's horse to check these new enemies. This was done for a time; but, as large numbers of the Prussians came on the field. they turned Lobau's left, and sent a strong force to seize the village of Planchenoit, which, it will be remembered, lay in the rear of the French right. Napoleon was now obliged to send his Young Guard to occupy that village, which was accordingly held by them with great gallantry against the reiterated assaults of the Prussian left under Bulow.

Heroic Defense.

But the force remaining under Napoleon was now numerically inferior to that under the Duke of Wellington, which he had been assailing throughout the day, without gaining any other advantage than the capture of La Haye Sainte. It is true that, owing to the gross misconduct of the greater part of the Dutch and Belgian troops, the duke was obliged to rely exclusively on his English and German soldiers, and the ranks of these had been fearfully thinned; but the survivors stood their ground heroically, and still opposed a resolute front to every forward movement of their enemies.

Napoleon had then the means of effecting a retreat. His Old Guard had yet taken no part in the action. Under cover of it, he might have withdrawn his shattered forces and retired upon

the French frontier. But this would only have given the English and Prussians the opportunity of completing their junction; and he knew that other armies were fast coming up to aid them in a march upon Paris, if he should succeed in avoiding an encounter with them, and retreating upon the capital. A victory at Waterloo was his only alternative from utter ruin, and he determined to employ his Guard in one bold stroke more to make that victory his own.

Between seven and eight o'clock the infantry of the Old Guard was formed into two columns, on the declivity near La Belle Alliance. Ney was placed at their head. Napoleon himself rode forward to a spot by which his veterans were to pass; and as they approached he raised his arm, and pointed to the position of the allies, as if to tell them, that their path lay there. They answered with loud cries of "Vive 1'Emperor!" and descended the hill from their own side into that "valley of the shadow of death," while their batteries thundered with redoubled vigor over their heads upon the British line.

Charge on British Centre.

The line of march of the columns of the Guard was directed between Hougoumont and La Haye Sainte, against the British right centre; and at the same time, Donzelot and the French, who had possession of La Haye Sainte, commenced a fierce attack upon the British centre, a little more to its left. This part of the battle has drawn less attention than the celebrated attack of the Old Guard; but it formed the most perilous crisis for the allied army; and if the Young Guard had been there to

support Donzelot, instead of being engaged with the Prussians at Planchenoit, the consequences to the allies in that part of the field must have been most serious.

The French tirailleurs, who were posted in clouds in La Haye Sainte, and the slieltered spots near it, completely disabled the artillerymen of the English batteries near them; and, taking advantage of the crippled state of the English guns, the French brought some field-pieces up to La Haye Sainte, and commenced firing grape from them on the infantry of the allies, at a distance of not more than a hundred paces. The allied infantry here consisted of some German brigades, who were formed in squares, as it was believed that Donzelot had cavalry ready behind La Haye Sainte to charge them with, if they left that order of formation. In this state the Germans remained for some time with heroic fortitude, though the grapeshot was tearing gaps in their ranks, and the side of one square was literally blown away by one tremendous volley which the French gunners poured into it.

Duke at the Front.

The Prince of Orange in vain endeavored to lead some Nassau troops to their aid. The Nassauers would not or could not face the French; and some battalions of Brunswickers, whom the Duke of Wellington had ordered up as a reenforcement, at first fell back, until the Duke in person rallied them and led them on. The Duke then galloped off to the right to head his men who were exposed to the attack of the Imperial Guard. He had saved one part of his centre from being routed; but the French had gained ground here, and

the pressure on the allied line was severe, until it was relieved by the decisive success which the British in the right centre achieved over the columns of the Guard.

The British troops on the crest of that part of the position, which the first column of Napoleon's Guards assailed, were Maitland's brigade of British Guards, having Adam's brigade on their right. Maitland's men were lying down, in order to avoid, as far as possible, the destructive effect of the French artillery, which kept up an unremitting fire from the opposite heights, until the first column of the Imperial Guard had advanced so far up the slope toward the British position that any further firing of the Freach artillerymen would endanger their own comrades.

Ney's Superb Bravery.

Meanwhile, the British guns were not idle; but shot and shell plowed fast through the ranks of the stately array of veterans that still moved imposingly Several of the French superior officers were at its head. Nev's horse was shot under him, but he still led the way on foot, sword in hand. The front of the massy column now was on the ridge of the hill. To their surprise, they saw no troops before them. they could discern through the smoke was a small band of mounted officers. One of them was the duke himself. The French advanced to about fifty vards from where the British Guards were lying down, when the voice of one of the band of British officers was heard calling, as if to the ground before him, "Up, Guards, and at them?"

It was the Duke who gave the order;

and at the words, as if by magic, up started before them a line of British Guards four deep, and in the most compact and perfect order. They poured an instantaneous volley upon the head of the French column, by which no less than three hundred of those chosen veterans are said to have fallen. The French officers rushed forward, and, conspicuous in front of their men, attempted to deploy them into a more extended line, so as to enable them to reply with effect to the British fire.

The French Routed.

But Maitland's brigade kept showering in volley after volley with deadly rapidity. The decimated column grew disordered in its vain efforts to expand itself into a more efficient formation. The right word was given at the right moment to the British for the bayonet charge, and the brigade sprung forward with a loud cheer against their dismayed antagonists. In an instant the compact mass of the French spread out into a rabble, and they fled back down the hill pursued by Maitland's men, who, however, returned to their position in time to take part in the repulse of the second column of the Imperial Guard.

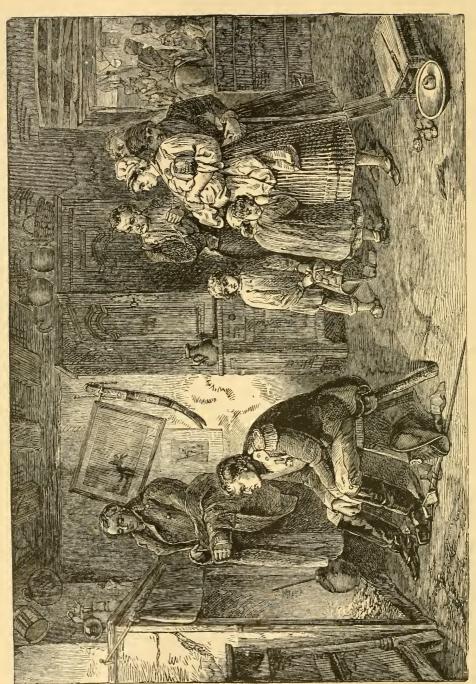
This column also advanced with great spirit and firmness under the cannonade which was opened upon it, and, passing by the eastern wall of Hougoumont, diverged slightly to the right as it moved up the slope toward the British position, so as to approach the same spot where the first column had surmounted the height and been defeated. This enabled the British regiments of Adam's brigade to form a line parallel to the left flank of the French column, so that while the front of this column

of French Guards had to encounter the cannonade of the British batteries, and the musketry of Maitland's Guards, its left flank was assailed with a destructive fire by a four-deep body of British infantry, extending all along it.

Veterans Hurled Back.

In such a position, all the bravery and skill of the French veterans were in vain. The second column, like its predecessor, broke and fled, taking at first a lateral direction along the front of the British line toward the river of La Haye Sainte, and so becoming blended with the divisions of French infantry, which, under Donzelot, had been pressing the allies so severely in that quarter. The sight of the Old Guard broken and in flight checked the ardor which Donzelot's troops had hitherto displayed. They, too, began to waver. Adam's victorious brigade was pressing after the flying Guard, and now cleared away the assailants of the allied centre.

But the battle was not yet won. Napoleon had still some battalions in reserve near La Belle Alliance. He was rapidly rallying the remains of the first column of his Guards, and he had collected into one body the remnants of the various corps of cavalry, which had suffered so severely in the earlier part of the day. The duke instantly formed the bold resolution of now himself becoming the assailant, and leading his successful though enfeebled army forward, while the disheartening effect of the repulse of the Imperial Guard on the French army was still strong, and before Napoleon and Ney could rally the beaten veterans themselves for



As the close approach of the Prussians now completely protected the duke's left, he had drawn some reserves of horse from that quarter, and had a brigade of Hussars under Vivian fresh and ready at hand. Without a moment's hesitation, he launched these against the cavalry near La Belle Alliance. The charge was as successful as it was daring; and as there was now no hostile cavalry to check the British infantry in a forward movement, the duke gave the long-wished-for command for a general advance of the army along the whole line upon the foe.

"Nine Deadly Hours."

It was now past eight o'clock, and for nine deadly hours had the British and German regiments stood unflinching under the fire of artillery, the charge of cavalry, and every variety of assault that the compact columns or the scattered skermishers of the enemy's infantry could inflict. As they joyously sprang forward against the discomfited masses of the French, the setting sun broke through the clouds which had obscured the sky during the greater part of the day, and glittered on the bayonets of the allies while they in turn poured down into the valley and toward the heights that were held by the foe.

Almost the whole of the French host was now in irretrievable confusion. The Prussian army was coming more and more rapidly forward on their right, and the Young Guard, which had held Planchenoit so bravely, was at last compelled to give way. Some regiments of the Old Guard in vain endeavored to form in squares. They were swept away to the rear; and then Na-

poleon himself fled from the last of his many fields, to become in a few weeks a captive and an exile. The battle was lost by France past all recovery. The victorious armies of England and Prussia, meeting on the scene of their triumph, continued to press forward and overwhelm every attempt that was made to stem the tide of ruin.

The British army, exhausted by its toils and suffering during that dreadful day, did not urge the pursuit beyond the heights which the enemy had occupied. But the Prussians drove the fugitives before them throughout the night. And of the magnificent host which had that morning cheered their emperor in confident expectation of victory, very few were ever assembled again in arms. Their loss, both in the field and in the pursuit, was immense; and the greater number of those who escaped, dispersed as soon as they crossed the frontier.

The army under the Duke of Wellington lost heavily in killed and wounded on this terrible day of battle. The loss of the Prussian army was even greater. At a fearful price was the deliverance of Europe purchased.

Battles Compared.

Hon. Theodore Roosevelt, Colonel of the Rough Riders in our war with Spain, made some interesting comparisons between the battles of Gettysburg and Waterloo, as follows:

"As the battles of Waterloo and Gettysburg, from their size, bloodiness, and decisive importance, have so often provoked comparison, it may be of interest to readers to compare the force and loss of the combatants in each. I take the figures for Waterloo from the

official reports as given by Dorsey Gardner in his 'Quatre Bras, Ligny and Waterloo,' and the figures for Gettysburg from 'Battles and Leaders of the Civil War,' and from Captain William F. Fox's 'Regimental Losses in the American Civil War.'

Infantry and Artillery.

"Unlike Waterloo Gettysburg was alnost purely a fight of infantry and artilery; the cavalry, which did good work luring the campaign, played no part in the battle itself, the bulk of the horse of the two contending armies being at the lime engaged in a subsidiary but entirely distinct fight of their own. The troops thus engaged should not be included in the actual fighting forces employed at Gettysburg itself, any more than Grouchy's French and the Prussians against whom they were pitted at Wavre can be included in the armies actually engaged at Waterloo. The exclusion will be made in both cases and the comparison thereby rendered more easy.

"Even making these exclusions it is impossible wholly to reconcile the various authorities, but the following figures must be nearly accurate. At Gettysburg there were present in action 80,000 to 85,000 Union troops, and of the Confederate some 65,000. At Waterloo there were 120,000 soldiers of the Allies under Wellington and Blucher, and some 72,000 French under Napoleon; or, there were about 150,000 combatants at Gettysburg and about 190,000 at Waterloo.

"In each case the weaker army made the attack and was defeated. Lee did not have to face such heavy odds as Napoleon, but whereas Napoleon's de-

feat was one in which he lost all his guns and saw his soldiers become a disorganized rabble, Lee drew off his army in good order, his cannon uncaptured, and the morale of his formidable soldiers nushaken.

"The defeated Confederates lost in killed and wounded 15,530, and in captures 7,467, some of whom were likewise wounded, or 23,000 in all; the defeated French lost from 25,000 to 30,000—probably nearer the latter number. The Confederates thus lost in killed and wounded at least 25 per cent. of their force, and yet they preserved their artillery and their organization, while the French suffered an even heavier proportional loss and were turned into a fleeing mob.

Heavy Federal Losses.

"At Gettysburg the Northerns lost 17,555 killed and wounded and 5435 missing; in other words, they suffered an actually greater loss than the much larger army of Wellington and Blucher; relatively it was half as great again, being something like 22 per cent. in killed and wounded alone. This gives some idea of the comparative obstinacy of the fighting.

"But in each case the brunt of the battle fell unequally on different organizations. At Waterloo the English did the heaviest fighting and suffered the heaviest loss, and though at Gettysburg no troops behaved badly, as did the Dutch-Belgians, yet one or two of the regiments composed of foreigners certainly failed to distinguish themselves. Meade had seven infantry corps, one of which was largely held in reserve. The six that did the actual fighting may be grouped in pairs. The se-

cond and third numbered nominally 23,610 (probably there were in reality several hundred less than this), and lost in killed and wounded 7586, or 32 per cent., and 974 missing, so that these two corps, whose aggregate force was smaller than that of Wellington's British regiments at Waterloo, nevertheless suffered a considerably heavier loss, and therefore must have done bloodier and, on the whole, more obstinate fighting.

"The First and Eleventh Corps, who were very roughly handled the first day, make a much worse showing in the missing column, but their death rolls are evidence of how bravely they fought. They had in all 18,600 men, of whom 6092, or 32 per cent. were killed and wounded and 3733 missing. The Fifth and Twelfth Corps, in the aggregate of 20,147 men, lost 2990, or 15 per cent. killed and wounded and 278 missing.

"Thus of the six Union corps which did the fighting at Gettysburg four suffered a relatively much heavier loss in killed and wounded than Wellington's British at Waterloo, and the other two a relatively much heavier loss than Blucher's Prussians.

"In making any comparison between the two battles it must, of course, be remembered that one occupied but a single day and the other very nearly three; and it is hard to compare the severity of the strain of a long and very bloody, with that caused by a short, and only less bloodless battle. Gettysburg consisted of a series of more or less comparatively isolated conflicts; but owing to the loose way in which the armies marched into action many of the troops that did the heaviest of the fighting were engaged for but a portion of the time. The Second and Third Corps were probably not heavily engaged for a very much longer period than the British regiments at Waterloo.

"Both were soldiers' rather than generals' battles. Both were waged with extraordinary courage and obstinacy and at a fearful cost of life. Waterloo was settled by a single desperate and exhausting struggle; Gettysburg took longer, was less decisive, and was relatively much more bloody. According to Wellington the chief feature of Waterloo was the 'hard pounding,' and at Gettysburg the pounding—or, as Grant called it, the 'hammering'—was even harder.'

CHAPTER XXII.

Decisive Battles of Austerlitz and Jena.

N the 21st of November, 1805, a striking and warlike cavalcade was traversing at a slow pace a wide and elevated plateau in Moravia. In front, on a grey horse, rode a short, sallow-faced man with dark hair and a quick, eager glance, whose notice nothing seemed to escape. His dress was covered by a grey overcoat, which met a pair of long riding-boots, and on his head was a low, weather-stained cocked hat.

He was followed by a crowd of officers, evidently of high rank, for their uniforms, saddle-cloths, and plumed hats were heavily laced, and they had the bold, dignified bearing of leaders of men. In front and in the flanks of the party were scattered watchful vedettes, and behind followed a strong squadron of picked cavalry in dark green dolmans with furred pelisses slung over their shoulders, and huge fur caps surmounted by tall red plumes.

The leading horseman rode in silence over the plateau, first to one point then to another, examining with auxious care every feature of the ground. He marked carefully the little village from which the expanse took its name, and the steep declivity which sloped to a muddy stream below. No one addressed him, for he was a man whose train of thought was not to be lightly interrupted.

Suddenly, at length, he drew rein, and, turning to the body of officers, said: "Gentlemen, examine this ground carefully. It will be a field of battle,

upon which you will all have a part to act." The speaker was Napoleon. His hearers were his generals and staff. He had been reconnoitring, surrounded and guarded by his devoted Chasseurs of the Guard, the plateau of Pratzen, the main part of the arena where was to be waged in a few days the mighty conflict of Austerlitz.

Napoleon's headquarters were then at Brunn. The French host, then for the first time called the "Grand Army," had, at the command of its great chief, in the beginning of September broken up the camps long occupied on the coasts of France in preparation for a contemplated invasion of England, and had directed its march to the Rhine. It was formed in seven corps under Bernadotte, Marmont, Davoust, Soult, Lannes, Ney, and Augereau, with its cavalry under Prince Murat, and the Imperial Guard as a reserve.

The Rhine was crossed at different points, and the tide of invasion swept upon the valley of the Danube. From the beginning the movements had been made with a swiftness unprecedented in war. Guns and cavalry had been moved in ceaseless and unhalting stream along every road. Infantry had pressed forward by forced marches, and had been aided in its onward way by wheeled transports at every available opportunity.

The Emperor had resolved to strike a blow by land against his foes which should counterbalance the several checks which the indomitable navy of England had inflicted on his fleets at sea. Austria and Russia were in arms against France, and he was straining every nerve to encounter and shatter their separate forces before they would unite in overwhelming power. The campaign had opened for him with a series of brilliant successes. The veterans of the revolutionary wars, of Italy and of Egypt, directed by his mighty genius, had proved themselves irresistible.

The Austrians had been the first to meet the shock, and had been defeated at every point—Gunzberg, Haslach, Albeck, Elchingen, Memmingen—and the first phase of the struggle had closed with the capitulation at Ulm of General Mack with 30,000 men.

Brilliant Successes.

But there had been no stay in the rush of the victorious French. The first defeats of the Austrian army had been rapidly followed up. The corps which had escaped from the disaster at Ulm were pursued and, one after another, annihilated. The Tyrol was overrun, and its strong positions occupied by Marshal Ney. From Italy came the news of Massena's successes against the celebrated Archduke Charles, and at Dirnstein Marshal Mortier had defeated the first Russian army under Kutusow.

The Imperial headquarters had been established at Schonbrunn, the home of the Emperor of Austria. Vienna had been occupied and the bridge across the Danube secured by Lannes and Murat. Kutusow, after his defeat at Dirnstein, had been driven back through Hollabrunn on Brunn by the same marshals at the head of the French advanced guard, and had now joined

the second Russian army, with which was its Emperor Alexander in person, and an Austrian force under Prince Lichtenstein, accompanied by the Emperor of Austria.

The main body of the "Grand Army" had, under Napoleon, followed its advanced guard into the heart of Moravia. Its headquarters and immediate base were now at Brunn, but its position was sufficiently critical, at the extremity of a long line of operations, numbering less than 70,000 disposable men, while the Russo-Austrian army in front amounted to 92,000. So rapid had been the movements since the camp at Boulogne was left, that the common saying passed in the ranks that "Our Emperor does not make use of our arms in this war so much as of our legs;" and the grave result of this constant swiftness had been that many soldiers had fallen to the rear from indisposition or fatigue, and even the nominal strength of corps was thus for the time seriously diminished. It is recorded that in the Chasseurs a-Cheval of the Guard alone there was a deficiency of more than four hundred men from this cause. But all these laggards were doing their best to rejoin the army before the great battle took place which all knew to be inevitable, and in which all were eager to bear their part.

The Army Resting.

Napoleon had himself arrived at Brunn on the 20th of November, and during the following days till the 27th he allowed his army a measure of repose to enable it to recover its strength after its long toils—to repair its arms, its boots and worn material, and to rally every man under its eagles. His

advanced guard had been pushed forward under Murat towards Wischau on the Olmutz road, Soult's corps on his right had pressed Kutusow's retreat towards Austerlitz, and the remainder were disposed in various positions to watch Hungary and Bohemia and to maintain his hold upon Vienna.

Guard Driven Back.

On the 27th the French advanced guard was attacked and driven back by the Russians at Wischau, and certain information arrived that this had been done by a portion of the main Russian army under the Emperor Alexander. It had been thought possible by Napoleon that peaceful negotiations might be opened, but this confident advance of his enemies seemed to show that they had by no means lost heart, and when on the 28th he had a personal interview with Prince Dolgorouki, the favorite of Alexander, he found the Russian proposals so insulting and presumptuous that he broke off abruptly any further communication.

We have seen Napoleon reconnoitering on the 21st of November, and we have marked the marvellous coup d'æil and prescience with which he foresaw the exact spot where the great battle, then looming before him, must take place. Every succeeding day saw the reconnoissance renewed, and never was a battle-field more thoroughly examined, never was forecast by a general of the actual turn of events to be expected more completely justified by fulfilment.

It had become certain that the united army of two mighty empires was close at hand. From the tone of Dolgorouki's communication it was evident that both the Russian and Austrian monarchs had

resolved to trust their fortunes to the ordeal of battle, and that they, with their generals and soldiery, were eager to retrieve their previous misfortunes, and full of confidence that they would do so. That confidence had been increased by the repulse of the French advanced guard at Wischau; and they now longed to complete their work by pouring their superior numbers on the comparatively weak French main body.

With this knowledge before him, Napoleon proceeded to carry out the plan of action which he had carefully matured. To the astonishment of many veterans in his army, a general retreat of his advanced troops was ordered. Murat fell back from Posoritz and Soult from near Austerlitz. But this retrograde movement was short, and they were halted on the ground chosen by Napoleon for his battle-line. The outlying corps of Bernadotte and Davoust was summoned to complete his array, Munitions, food, ambulances were hurried to their appointed posts, and it was announced that the battle would be fought on the 1st or 2d of December.

Daring Strategy.

The line of a muddy stream, called the Goldbach, marked the front of the French army. This stream takes its source across the Olmutz road, and flowing through a dell, of which the sides are steep, discharges itself into the Menitz Lake. At the top of its high left bank stretches the wide Pratzen plateau, and it appeared to Napoleon's staff that he had made an error in relinquishing such a vantage ground to his enemy; but he told them that he had done so of set purpose, saying, "If I remained master of this fine

plateau, I could here check the Russians, but then I should only have an ordinary victory; whereas by giving it to them and refusing my right, if they dare to descend from these heights in order to outflank me, I secure that they shall be lost beyond redemption."

Let us examine the positions occupied by the French and the Austro-Russian armies at the close of November, and we shall the better understand the general strategy of the two combatant forces and the tactics which each made use of when they came into collision. The Emperor Napoleon rested his left, under Lannes and Murat, on a rugged eminence, which those of his soldiers who had served in Egypt called the "Santon," because its crest was crowned by a little chapel, of which the roof had a fancied resemblance to a minaret.

An Impregnable Fortress.

This eminence he had strengthened with field works, armed and provisioned like a fortress. He had, by repeated visits, satisfied himself that his orders were properly carried out, and he had committed its defence to special defenders under the command of General Claparede, impressing upon them that they must be prepared to fire their last cartridge at their post and, if necessary, there to die to the last man.

His centre was on the right bank of the Goldbach. There were the corps of Soult and Bernadotte, the Grenadiers of Duroc and Oudinot, and the Imperial Guard with forty guns. Their double lines were concealed by the windings of the stream, by scattered clumps of wood, and by the features of the ground.

His right was entrusted to Davoust's corps, summoned in haste to the battle-

field, and of which only a division of infantry and one of Dragoons had been able to come into line. They were posted at Menitz, and had the defiles passing the Menitz Lake and the two other lakes of Teluitz and Satschau. Napoleon's line of battle was thus an oblique one, with its right thrown back. It had the appearance of being only defensive, if not actually timid, its centre not more than sufficiently occupied, its right extremely weak, and only its left formidable and guaranteed against any but the most powerful attack.

Setting a Trap.

But the great strategist had weighed well his methods. He trusted that the foe would be tempted to commit themselves to an attack on his right, essaying to cut his communications and line of retreat on Vienna. If they could be led into this trap, the difficulty of movement in the ground cut up by lake, stream, and marsh would give to Davoust the power to hold them in check until circumstances allowed of aid being given to him. Meantime, with his left impregnable and his centre ready to deal a crushing blow, he expected to be able to operate against the Russo-Austrian flank and rear with all the advantage due to unlooked-for strength.

The right of the Russo-Austrians, commanded by the Princes Bagration and Lichtenstein, rested on a wooded hill near Posoritz across the Olmutz road. Their centre, under Kollowrath, occupied the village of Pratzen and the large surrounding plateau; while their left, under Doctorof and Kienmyer, stretched towards the Satchau Lake and the adjoining marshes.

The village of Austerlitz was some distance in the rear of the Russo-Austrian position, and had no immediate connection with the movements of the troops employed on either side, but the Emperors of Russia and Austria slept in it on the night before the battle, and Napoleon afterwards accentuated the greatness of his victory by naming it after the place from which he had chased them.

An Unequal Contest.

The two great armies now in presence of each other were markedly unequal in strength—92,000 men were opposed to 70,000, and the advantage of 22,000 was to the allies. But this inequality was to a great extent compensated by the tactical dispositions of the leader of the weaker force. Of the two antagonist lines, one was wholly exposed to view, the other to a great extent concealed—first advantage to the latter. They formed, as it were, two parallel arcs of a circle, but that of the French was the more compact and uninterrupted—second advantage; and this last was soon to be increased by the imprudent Russian manœuvres. The two armies, barely at a distance of two cannon-shot from each other, had by mutual tacit consent formed their bivonacs, piled arms, fed and reposed peaceably around their fires, the one covered by a thick cloud of Cossacks, the other by a sparse line of vedettes.

Napoleon quitted Brunn early in the morning of the 1st of December, and employed the whole of that day in examining the positions which the different portions of his army occupied. His headquarters were established in the rear of the centre of his line at a high

point, from which could be seen the bivouacs of both French and allies, as well as the ground on which the morrow's issue would be fought out. The cold was intense, but there was no snow. The only shelter that could be found for the ruler of France was a dilapidated hut, in which were placed the Emperor's table and maps.

The Grenadiers had made up a huge fire hard by, and his travelling carriage was drawn up, in which he could take such sleep as his anxieties would permit. The divisions of Duroc and Oudinot bivouacked between him and the enemy, while the Guard lay round him and towards the rear.

A Huge Blunder.

In the late afternoon of the same day Napoleon was watching the allied position through his telescope. On the Pratzen plateau could be seen a general flank movement of Russian columns, in the rear of their first line, from their centre to their left and towards the front of the French position at Telnitz. It was evidently supposed by the enemy that the French intended to act only on the defensive, that nothing was to be feared from them in front, and that the allies had only to throw their masses on their right, cut off their retreat upon Vienna, and thus inflict upon them a certain and disastrous defeat.

It was forgotten by the Russo-Austrians that in thus moving their principal forces to the left, the centre of their position was weakened, and on the right their own line of operations and retreat was left entirely unprotected. When Napoleon detected what was being done, trembling with satisfaction and clapping his hands, he said: "What

a manœuvre to be ashamed of! They are running into the trap! They are giving themselves up! Before to-morrow evening that army will be in my hands!" In order still more to add to the confidence of his enemy and to encourage them in the prosecution of their mistaken plan, he ordered Murat to sally forth from his own position with some cavalry, to manœuvre as if showing uneasiness and hesitation, and then to retire with an air of alarm.

Promises Victory.

This order given, he returned immediately to his bivouac, dictated and issued his famous proclamation in which he assured his army that the Austro-Russians were exposing their flank and were offering certain glory to the soldiers of France as a reward for their valor in the coming struggle: he said that he himself would direct their battalions, but that he would not expose himself to danger unless success was doubtful, and he promised that after their victory, they should have comfortable cantonments and peace.

The evening of the 1st of December closed in. The allied movement towards their left was still continuing, and Napoleon, after renewing his orders, again visiting his parks and ambulances and satisfying himself by his own observation that all was in order. threw himself on a bundle of straw and slept. About eleven o'clock he was awakened and told that a sharp attack had been made on one of the villages occupied by his right, but that it had been repulsed. This further confirmed his forecast of the allied movements. but, wishing to make a last reconnaissance of his enemy's position, he again mounted, and, followed by Junot, Duroc, Berthier, and some others of his staff, he ventured between the two armies.

As he closely skirted the enemy's line of outposts, in spite of several warnings that he was incurring great risk, he, in the darkness, rode into a picket of Cossacks. These sprang to arms and attacked him so suddenly that he would certainly have been killed or taken prisoner if it had not been for the devoted courage of his escort, which engaged the Cossacks while he turned his horse and galloped back to the French lines. His escape was so narrow and precipitate that he had to pass without choosing his way the marshy Goldbach stream.

"A Cry was Raised."

His own horse and those of several of his attendants—amongst others Ywan, his surgeon, who never left his person—were for a time floundering helpless in the deep mud, and the Emperor was obliged to make his way on foot to his headquarters past the fires round which his soldiers were lying. In the obscurity he stumbled over a fallen tree-trunk; and it occurred to a grenadier who saw him, to twist and use some straw as a torch, holding it over his head to light the path of his sovereign.

In the middle of the anxious night, full of disquietude and anticipation, the eve of the anniversary of the Emperor's coronation, the face of Napoleon, lighted up and suddenly displayed by this flame, appeared almost as a vision to the soldiers of the nearest bivouacs. A cry was raised, "It is the anniversary of the coronation! Vive l'Empereur!"—an outburst of loyal ardor which Napoleon in vain attempted to check with

the words, "Silence till to-morrow. Now you have only to sharpen your bayonets."

But the same thought, the same cry, was taken up and flew with lightning quickness from bivouac to bivouac. All made torches of whatever material was at hand. Some pulled down the fieldshelters for the purpose—some used the straw that had been collected to form their beds; and in an instant, as if by enchantment, thousands of lights flared upwards along the whole French line, and by thousands of voices the cry was repeated, "Vive l'Empereur!" Thus was improvised, within sight of the astonished enemy, the most striking of illuminations, the most memorable of demonstrations, by which the admiration and devotion of a whole army have ever been shown to its general.

His Happiest Night.

It is said that the Russians believed the French to be burning their shelters as a preliminary to retreat, and that their confidence was thereby increased. As to Napoleon, though at first annoyed at the outburst, he was soon gratified and deeply touched by the heart-felt enthusiasm displayed, and said that "This night is the happiest of my life." For some time he continued to move from bivouac to bivouac, telling his soldiers how much he appreciated their affection, and saying those kindly and encouraging words which no one better than he knew how to use.

The morning began to break on the 2d of December. As he buckled on his sword, Napoleon said to the staff gathered round—"Now, gentlemen, let us commence a great day." He mounted, and from different points were seen ar-

riving to receive his last orders the renowned chiefs of his various corps-d'armee, each followed by a single aidede-camp. There were Marshal Prince Murat, Marshal Lannes, Marshal Soult, Marshal Bernadotte, and Marshal Davoust. What a formidable circle of men, each of whom had already gathered glory on many different fields!

Matchless Murat.

Murat, distinctively the cavalry general of France, the intrepid paladin who had led his charging squadrons on all the battle-fields of Italy and Egypt; Lannes, whose prowess at Montebello had made victory certain; Soult, the veteran of the long years of war on the Rhine and in Germany, the hero of Altenkirchen, and Massena's most distinguished lieutenant at the battle of Zurich; Bernadotte, not more renowned as a general in the field than as the minister of war who prepared the conquest of Holland; Davoust, the stern disciplinarian and leader, unequalled for cool gallantry and determinationall were gathered at this supreme moment round one of the greatest masters of war in ancient or modern times, to receive his inspiration and to part like thunder-clouds bearing the storm which was to shatter the united armies of two Empires.

The Emperor's general plan of action was already partly known, but he now repeated it to his marshals in detail. He was more than ever certain, from the last reports which he had received, that the enemy was continuing the flank movement, and would hurl the heaviest attacks on the French right near Telnitz.

To Davoust was entrusted the duty

of holding the extreme right and checking, in the defiles formed by the lakes, the heads of the enemy's columns which, since the previous day, had been more and more entangling themselves in these difficult passes.

Of Soult's three divisions, one was to assist Davoust on the right, while the other two, already formed in columns of attack, were to hold themselves ready to throw their force on the Pratzen plateau.

Bernadotte's two divisions were to advance against the same position on Soult's left. This combined onslaught of four divisions on the centre of the Russo-Austrians which they had weakened by the movement to their left, would be supported by the Emperor himself with the Imperial Guard and the Grenadiers of Oudinot and Duroc. Lannes was ordered to hold the left. particularly the "Santon" height; while Prince Murat, at the head of his horsemen, was to charge through the intervals of the infantry upon the allied cavalry which appeared to be in great strength in that part of the field.

Napoleon's Strategy.

It was thus Napoleon's intention to await and check the enemy's attacks which might be expected on both his flanks, and more especially on his right, while he himself made a determined and formidable movement against their centre, where he hoped to cut them in two, and then, from the dominant position of the Pratzen plateau, turn an overwhelming force against the masses on their too-far-advanced left, which, entangled and cramped in its action among the lakes, would then be crushed or forced to yield as prisoners.

It was eight o'clock. The thick wintry mist hung in the valley of the Goldbach and rolled upwards to the Pratzen plateau. Its obscurity, heightened by the lingering smoke of bivouac fires, concealed the French columns of attack. The thunder of artillery and the rattle of musketry told that the allied attack on the French right had begun and was being strenuously resisted, while silence and darkness reigned over the rest of the line. Suddenly, over the heights, the sun rose, brilliantly piercing the mist and lighting the battle-field—the "Sun of Austerlitz," of which Napoleon ever after loved to recall the remembrance.

Furious Onslaught.

The moment of action for the French centre had come, and the corps of Soult and Bernadotte, led by the divisions of Vandamme and St. Hilaire, rushed forwards. No influence that could animate the minds of these gallant troops was wanting. They fought directly under the eye of their Emperor. They were led by chiefs in whom they had implicit confidence.

The Pratzen height was escladed at the double, attacked in front and on the right and left, and the appearance of the assailants was so sudden and unexpected, as they issued from the curtain of mist, that the Russians were completely surprised. They had no defensive formation ready, and were still occupied in the movement towards their left. They hastily formed in three lines, however, and some of their artillery were able to come into action. Their resistance was feeble. One after another, their lines, broken by the stern bayonet charge, were driven back in

hopeless confusion, and at nine o'clock Napoleon was master of the Pratzen plateau.

Meanwhile, on the left, Lannes and Murat were fighting an independent battle with the Princes Lichtenstein and Bagration. Murat, as the senior marshal and brother-in-law of the Emperor, was nominally the superior; but, in real fact, Lannes, directed the operations of the infantry, which Murat powerfully supplemented and aided with his cavalry. General Caffarelli's division was formed on the plain on Lannes's right, while General Suchet's division was on his left, supported by the "Santon" height, from which poured the fire of eighteen heavy guns.

Dashing Cavalry Charge.

The light cavalry brigades of Milhaud and Treilhard were pushed forward in observation across the high road to Olmutz. The cavalry divisions of Kellermann, Walther, Nansouty, and d'Hautpoul were disposed in two massive columns of squadrons on the right of Caffarelli. Against this array were brought eighty-two squadrons of cavalry under Lichtenstein, supported by the serried divisions of Bagration's infantry and a heavy force of artillery.

The combat was commenced by the light cavalry of Kellermann, which charged and overthrew the Russo-Austrian advanced guard. Attacked in turn by the Uhlans of the Grand Duke Constantine, Kellermann retired through the intervals of Caffarelli's division, which, by a well-sustained fire in two ranks, checked the Uhlans and emptied many of their saddles. Kellermann reformed his division and again charged,

supported by Sebastiani's brigade of Dragoons.

Then followed a succession of charges by the chivalry of France, led by Murat with all the *elan* of his boiling courage. Kellermann, Walther, and Sebastiani were all wounded, the first two generals seriously. In the last of these charges the 5th Chasseurs, commanded by Colonel Corbinean, broke the formation of a Russian battalion and captured its standard. Caffarelli's infantry were close at hand, and, pushing forward, made an Austrian battalion lay down its arms.

A regiment of Russian Dragoons made a desperate advance to rescue their comrades, and, mistaking them for Bavarians in the smoke and turmoil, Murat ordered the French infantry to cease firing. The Russian Dragoons, thus encountering no resistance, penetrated the French ranks and almost succeeded in taking Murat himself prisoner. But, consummate horseman and man-at-arms as he was, he cut his way to safety through the enemy, at the head of his personal escort.

The Russians Hurled Back.

The allies profited by this diversion to again assume the offensive. Then came the opportunity for the gigantic Cuirassiers of Nansouty, which hurled the Russian cavalry back upon their infantry, and, in three successive onslaughts, scattered the infantry itself, inflicting terrible losses with their long, heavy swords, and seizing eight pieces of artillery. The whole of Caffarelli's division advanced, supported by one of Bernadotte's divisions from the centre, and, changing its front to the right, cut the centre of Bagratiou's infantry.

driving its greater part towards Pratzen, separated from those who still fought at the extremity of their line.

The Austro-Russian cavalry rallied in support of Bagration, who was now hotly pressed by Suchet. Then came a magnificently combined movement of Dragoous, Cuirassiers, and infantry. The Dragoous drove back the Austro-Russian squadrons behind their infantry. Simultaneously followed the levelled bayonets of Suchet's division and the crushing shock of d'Hautpoul's mail-clad warriors. The victory was decided—the Russian battalions were crushed, losing a standard, eleven guns, and 1,800 prisoners.

Allied Army Shattered.

The rout was completed by the rapid advance of the light cavalry brigades of Treilhard and Milhaud on the left, and of Kellermann on the right, which swept away all that encountered them, and drove the shattered allied troops towards the village of Austerlitz. The Russo-Austrian losses on this part of the field of battle amounted to 1,200 or 1,500 killed, 7,000 or 8,000 prisoners, two standards, and twenty-seven pieces of artillery.

While Napoleon had thus struck a heavy blow at the allied centre and had been completely victorious on his left, his right, under Davoust, was with difficulty holding its own against Buxhowden (who had assumed the command of the columns of Doctorof and Kienmayer), and but that the masses brought against it were unable to deploy their strength it must inevitably have been crushed. Thirty thousand foemen of all arms were pressing in assault upon 10,000 French, already wearied by a

long and rapid march to their position at Raygern. But Davoust was able to concentrate what power he had, and to meet at advantage the heads only of the columns which were winding their way along the narrow passes that opened between the lakes and through the marshy ground in his front.

A Critical Moment.

Even so the strain was terrible, and would have been more than less hardy troops under a less able and determined leader could have stood. But Napoleon was quite alive to the necessities of the gallant soldiers who were standing their ground so staunchly. He ordered his reserve of Grenadiers and the Imperial Guard to move up to the support of his right centre and to threaten the flank of the columns that were attacking Davoust, while he also directed the two divisions of Soult's corps, which had made the attack on the Pratzen plateau against Buxhowden's rear.

It was one o'clock, and at this moment, while the orders just given were being executed, the Russian infantry, supported by the Russian Imperial Guard, made a desperate effort to retrieve the fortunes of the day near Pratzen, and threw themselves in a fierce bayonet charge on the divisions of Vandamme and St. Hilaire, which offered a stout resistance. But, with the Russian Guard ready to join in the combat, the odds against the French divisions were too great. It was the crisis of the day.

Napoleon, from the commanding position where he stood, saw before him the Emperor Alexander's guard advancing in dense masses to regain their morning position and to sweep before

them his men, wearied and harassed by the day's struggle. At the same time he heard on his right the redoubled fire of the advanced Russian left, which was pressing Davoust and was threatening his rear. From the continued and increasing roar of musketry and artillery it almost seemed as if success must, after all, attend the great flank movement of the allies. Small wonder if even his war-hardened nerves felt a thrill of confusion and anxiety when he saw dimly appearing through the battle smoke another black mass of moving troops.

Panic-Stricken Fugitives.

"Ha! Can those, too, be Russians?" he exclaimed to the solitary staff-officer whom the exigencies of the day had still left at his side. Another look reassured him, however. The tall bearskins of the moving column showed him that it was his own Guard, which, under Duroc, was moving towards the lakes to the support of Soult and Davoust. His right and rear were, at any rate so far safe.

But the Russian intentry attack had been followed by a headlong charge of the Chevalier Guards and Cuirassiers of the Russian Guard, under the Grand Duke Constantine, brother of the Emperor Alexander, supported by numerous lines of cavalry. So well led and so impetuous was the attack, that the two battalions on the left of Vandamme's division were broken and swept away in headlong flight. One of these battalions belonged to the 4th of the line, of which Napoleon's brother Joseph was colonel, and the Emperor saw it lose its eagle and abandon its position, shattered and destroyed, forming the one dark spot to sully the brilliancy of French steadfastness on that day of self-devotion.

The tide of panic-stricken fugitives almost surged against the Emperor himself. All efforts to rally them were Maddened with fear, they in vain. heard not the voices of generals and officers imploring them not to abandon the field of honor and their Emperor. Their only response was to gasp out mechanically: "Vive l'Empereur!" while still hurrying their frantic pace. Napoleon smiled at them in pity; then, with a gesture of contempt, he said: "Let them go!" and, still calm in the midst of the turmoil, sent General Rapp to bring up the cavalry of his Guard.

A Bloody Struggle.

Rapp was titular folonel of the Mamelukes, a corps which reached the glories of Egypt and the personal regard which Napoleon, as a man, had been able to inspire into Orientals. They, with the Grenadiers-a-Cheval and the Chasseurs of the Guard, now swooped upon the Russian squadrons. The struggle of the mélée was bloody and obstinate between the picked horsemen of Western and Eastern Europe; but the Russian chivalry was at length overwhelmed and driven back with immense loss.

Many standards and prisoners fell into the hands of the French, amongst others Prince Repnin, Colonel of the Chevalier Guard. His regiment, whose ranks were filled with men of the noblest families in Russia, had fought with a valor worthy of their name, and lay almost by ranks upon the field. It had been the mark of the giant Grena-

diers-a-Cheval, whose savage war-cry in the great charge had been, as they swayed their heavy sabres, "Let us make the dames of St. Petersburg weep to-day!"

When success was assured, Rapp returned to report to Napoleon—a war-like figure, as he approached, alone, at a gallop, with proud mein, the light of battle in his eye, his sword dripping with blood and a sabre cut on his forehead.

A Gallant Exploit.

"Sire, we have overthrown and destroyed the Russian Guard and taken their artillery."

"It was gallantly done: I saw it," replied the Emperor. "But you are wounded."

"It is nothing, sire: it is only a scratch."

"It is another quartering of nobility, and I know of none that can be more illustrious."

Immediately afterwards the young Count Apraxin, an officer of artillery who had been taken prisoner by the Chasseurs, was brought before Napoleon. He struggled, wept, and wrung his hands in despair, crying: "I have lost my battery; I am dishonored: would that I could die!" Napoleon tried to console and soothe him with the words, "Calm yourself, young man, and learn that there is never disgrace in being conquered by Frenchmen."

The French army was now completely successful on its centre and left. In the distance could be seen, retiring towards Austerlitz, the remains of the Russian reserves, which had relinquished hope of regaining the central plateau and abandoned Buxhowden's

wing to its fate. Their retreat was harassed by the artillery of the Imperial Guard, whose fire ploughed through their long columns, carrying with it death and consternation. Napoleon left to Murat and Lannes the completion of their own victory. To Bernadotte, with the greater part of the Guard, he entrusted the final crushing of the enemies who had been driven from the Pratzen plateau; while he himself, with all of Soult's corps, the remainder of his cavalry, infantry, and reserve artillery descended from the heights and threw himself on the rear of the Austro-Russian left near Telnitz and the lakes. This unfortunate wing-nearly 30,000 men-had in vain striven, since the morning, to force its way through Davo1/st's 10,000.

Valor Was in Vain.

Now, still checked in front and entangled in the narrow roads by the Goldbach and the lakes, it found itself in hopeless confusion, attacked and ravaged with fire from three sides simultaneously by Davoust, Soult, Duroc with his Grenadiers and Vandamme. It fought with a gallantry and sternness which drew forth the admiration of its enemies, but surrounded, driven, overwhelmed, it could not hope to extricate itself from its difficulties. There was no way of escape open but the Menitz lake itself, whose frozen surface seemed to present a path to safety, and in an instant the white expanse was blackened by the flying multitude.

The most horribly disastrous phase of the whole battle was at hand. The shot of the French artillery which was firing on the retreat broke the ice at many points, and its frail support gave way. The water welled through the cracks and washed over the broken fragments. Thousands of Russians, with horses, artillery and train, sank into the lake and were engulfed. Few succeeded in struggling to the shore and taking advantage of the ropes and other assistance which their conquerors strove to put within their reach. About 2,000, who had been able to remain on the road between the two lakes, made good their retreat. The remainder were either dead or prisoners.

Suspected Traitor.

At four o'clock in the afternoon the battle was over, and there was nothing left for the French to do but to pursue and collect the spoils of their conquest. This duty was performed with energy by all the commanders except Bernadotte (even then more than suspected of disloyalty to his great chief), who allowed the whole of the Russo-Austrian right, which had been defeated by Lannes and Murat and driven from its proper line of retreat on Olmutz, to defile scatheless past his front and to seek shelter in the direction of Hungary.

After the great catastrophe on the Menitz lake which definitely sealed the issue of the conflict, Napoleon passed slowly along the whole battle-field, from the French right to their left. The ground was covered with piles of the poor remains of those who had died a soldier's death, and with vast numbers of wounded laid suffering on the frozen plain. Surgeons and ambulances were already everywhere at work, but their efforts were feeble in comparison with the shattered, groaning multitude who were in dire need of help. The Emperor paused by every disabled follower and

spoke words of sympathy and comfort. He himself, with his personal attendants and his staff, did all in their power to mitigate the pangs of each and to give some temporary relief till better assistance should arrive.

As the shades of night fell on the scene of slaughter and destruction, the mist of the morning again rolled over the plain, bringing with it an icy rain, which increased the darkness. Napoleon ordered the strictest silence to be maintained, that no faint cry from a miserable sufferer should pass unheard; and his surgeon Ywan, with his Mameluke orderly Roustan, gave to many a one, who would otherwise have died, a chance of life by binding up their hurts and restoring their powers with a draught of brandy from the Imperial canteen.

Care for the Wounded.

It was nearly ten o'clock at night when the Emperor arrived at the Olmutz road, having almost felt his way from one wounded man to another as they lay where each attack had been made and each stubborn defense maintained. He passed the night at the small posthouse of Posoritz, supping on a share of the soldiers' rations, which was brought from the nearest bivouac, and issuing order after order about searching for the wounded and conveying them to the field hospitals. Though many of the most noted leaders in the French army were wounded in the great battle, comparatively few were killed. One of the most distinguished dead was General Morland, who commanded the Chasseurs-a-Cheval of the Guard. His regiment had suffered terrible losses in the charge under Rapp

against the Russian Guard, and he himself had fallen, fighting amongst the foremost.

Napoleon, who was always anxious to do everything to raise the spirit of his troops and to excite their emulation, ordered that the body of General Morland should be preserved and conveyed to Paris, there to be interred in a specially magnificent tomb which he proposed to build on the Esplanade of the Invalides. The doctors with the army had neither the time nor the materials necessary to embalin the general's body, so, as a simple means of conservation, they enclosed it in a barrel of rum, which was taken to Paris. But circumstances delayed the construction of the tomb which the Emperor intended for its reception until the fall of the Empire in 1814. When the barrel was then opened for the private interment of the body by General Morland's relations, they were astonished to find that the rum had made the dead general's monstaches grow so extraordinarily that they reached below his waist.

The Host in Flight.

The defeat suffered by the Russians was so crushing, and their army had been thrown into such confusion, that all who had escaped from the disaster of Austerlitz fled with all speed to Galicia, where there was a hope of being beyond the reach of the conqueror. The rout was complete. The French made a large number of prisoners, and found the roads covered with abandoned guns, baggage, and material of war. The Emperor Alexander, overcome by his misfortunes, left it to his ally, Francis II., to treat with Napoleon, and authorized him to make the best It was the first in which he engaged

terms he could for both the defeated empires.

On the very evening of the 2d of December the Emperor of Austria had asked for an interview with Napoleon, and the victor met the vanquished on the 4th. An armistice was signed on the 6th, which was shortly afterwards followed by a treaty of peace concluded at Presburg.

The total losses of the Austro-Russians at Austerlitz were about 10,000 killed, 30,000 prisoners, 46 standards, 186 cannon, 400 artillery caissons, and all their baggage. Their armies practically no longer existed, and only about 25,000 disheartened men could be rallied from the wreck.

Generous to the Conquered.

In the joy of victory Napoleon showed himself generous to Austria and Russia in the terms which he imposed, and he at once set free Prince Repnin, with all of the Russian Imperial Guard who had fallen into his hands. To his own army he was lavish of rewards and acknowledgements of its valor, and in the famous order of the day which he published he first made use of the well-known expression-"Soldiers, I am content with you." Besides a large distribution of prize-money to his troops, he decreed that liberal pensions should be granted to the widows of the fallen, and also that their orphan children should be cared for, brought up, and settled in life at the expense of the State.

The campaign of Austerlitz is probably the most striking and dramatic of all those undertaken by Napoleon, and its concluding struggle was the most complete triumph of his whole career.

after assuming the title of Emperor and becoming the sole and irresponsible ruler of France. Unlike the vast masses of men which he directed in subsequent wars, his army was then almost entirely composed of Frenchmen, and its glories belonged to France alone. Though for several years to come the great Emperor's fame was to remain undimmed by the clouds of reverse, it never shone with a brighter lustre than at the close of 1805.

Fierce Battle of Jena.

As the bloody battle of Austerlitz was one of those great pivotal struggles that decide the fate of empires, so was the equally sanguinary and decisive battle of Jena. Never was the superb courage of the far-famed Murat and other great leaders more gallantly displayed than on that historic field.

To the Prussian people 1806 was a terrible year, and their subsequent reprisals of 1814, 1815, and even of 1870, did not efface the memory of Jena, as the French elect to call the little Saxon town. Whatever difference of opinion may exist as to the good faith of Napoleon and the Prussian Government respectively in their diplomatic relations, all are agreed that the military spirit of Prussia hastened on the war; and never did nation undertake hostilities at a more unfortunate moment or in clumsier fashion.

The French army, returning slowly from its glorious campaign of Austerlitz, was close at hand, and flushed with victory; and although in rags, with its pay held advisedly in arrears, it was in high moral feather, and looking forward to the fetes that were promised it when it should arrive in France.

The Prussian army, on the other hand, while full of undoubted courage, was precisely in that condition one would expect as the result of its ruling system. Its regiments were farmed out by their colonels; class distinction was rife among the officers, and the men were ruled by "Corporal Schlague"—I in other words, flogged unmercifully into shape. Their drill and traditions went back to days of Frederick the Great, and the only pension granted to the discharged veteran was a license to beg publicly!

Wretched was the condition of the soldier, even when serving, yet it was this army, with little or no sympathy between its officers and men, strapped up in tight uniforms, hampered with absurd regulations, and in every respect half a century behind the times, that sharpened its sabres on the doorsteps of the French ambassador at Berlin, and clamored wildly to engage the invincible legions of the Emperor.

Disastrous Defeat.

It had its wish, against the better judgment of its sovereign, and met with perhaps the most crushing defeat recorded in history, being sacrificed to the gross stupidity of its leaders, of whom a word must be said here in justice to the army itself.

The Duke of Brunswick, its actual commander-in-chief, the father of the unfortunate English Queen Caroline, was seventy years old, and credited with a great military reputation, though authentic proofs of it may be searched for in vain. He had fought under the celebrated Frederick, who disliked him, and had been beaten by the riff-raff in the wars of the Revolution. One re-

view day at Magdeburg, when a fieldmarshal, he sprang from the saddle, allowed his charger to run loose, and caned a non-commissioned officer for some mistake in a manœuvre; but nevertheless it was into the hands of this egregious old dolt that the Prussian fortunes were entrusted.

Held a Long Pow-wow.

Associated with Brunswick-and in truth they seem to have been unable to do anything without previously holding a long pow-wow when they ought to have been marching-were Marshal Mollendorf, a worn-out old man of eightytwo; Prince Frederick Louis of Hohenlohe-Ingelfingen, an infantry general, whose sixty years had afforded him little opportunity of distinction in the field; Colonel Massenbach, Hohenlohe's quartermaster-general, whose practical advice was not listened to, probably because it was practical; and several other officers, some of whom distinguished themselves later on in the War of Liberty, but the majority men of no account, who squabbled at the councils, disobeyed orders, and had nothing but personal bravery to commend them.

At the head of the younger branch of officers was Prince Louis Ferdinand, a dashing, hare-brained young fellow, whose passion was pretty equally divided between the worship of Venus and Mars, and whose early death was much deplored. Between the two factions, ancient and modern, there was perpetual strife, and between these two stools, which the energetic French kicked over in an incredibly short time, the Prussian army came heavily to the ground.

"The insolent braggarts shall soon

learn that *our* weapons need no sharpening!" said Napoleon, when Marbot told him of the affront to his ambassador; and again, when he read the foolish demand that his troops should cross the Rhine and abandon German territory by a given date, he exclaimed to Bertheir, "Prince, we will be punctually at the rendezvous; but instead of being in France on the 8th, we will be in Saxony."

The October of 1806 was a splendid month—a slight frost during the nights, but the days magnificent, with white camuli rolling across the blue, when the blue was not entirely unclouded; and on the 8th day of that eventful month the French advanced in three great columns into the rocky valleys that led from Franconia to Saxony; an army—when the cavalry and artillery of the Guard joined it—of 186,000 men, led by masters in the art of war.

Napoleon in the Ranks.

The Emperor accompanied the centre column, composed of the infantry of the Guard, under Lefebvre, husband of the well-known "Madame Sans-Gene," Bernadotte's 1st corps, Davout's 3d Corps, and Murat's Cavalry Reserve; the whole marching by Kronach on the road to Schleitz and Jena. The right column consisting of Soult's 4th and Ney's 6th Corps with a Bavarian division, set out for Hoff by forced marches, and the left, made up of Lannes with the 5th Corps and Augereau with the 7th, turned its face towards Coburg, Grafenthal, and Saalfeld.

The Prussians, to the number of 125,-000, which did not include garrisons and sundry detached forces, were also divided into three bodies; General Ruchel with the right, 30,000, being on the Hessian frontier about Eisenach; the main army of 55,000, under Brunswick and the King in person, around Magdeburg; and the left wing, under Hohenlohe, 40,000 strong, being advanced towards the enemy round and about the fortified places of Schleitz, Saalfeld, Saalburg, and Hoff, in defiaince of Brunswick's orders, which desired Hohenlohe to recross the Saale and take post behind the mountains that rise above that river.

Dense Ignorance.

Their motive was to cut off Napoleon from his base in the Maine valley; but directly they heard that his march was directed towards their left and centre, they changed their plans and attempted a concentration about Weimar, which exposed their magazines, threw their flank invitingly open to the enemy, and necessitated marches by cross roads and byways in a country of which extraordinary fact, their staff possessed no reliable map!

While this movement was in progress the French came upon them, and struck the first blow at the little town of Saalbuvg, where a portion of Hohenlohe's men under General Tauenzien were entrenched behind the river. It was the first day of the advance, and Murat, with some light cavalry and the famous 27th Light Infantry, lost no time in falling to.

Some cannon-shots, an advance of the 27th Leger, and Tauenzien melted away in the direction of Schleitz, where on the 9th, about noon, the centre found him drawn up beyond the Wisenthal in order of battle with his back against a height. While Bernadotte, who commanded, was reconnoitring, Napoleon

arrived, and ordered the attack. Bernadotte sent the 27th Leger forward under General Maisons, and the regiment quickly debouched from the town upon the enemy; but finding himself in the presence of a superior force, Tauenzien again ordered a retreat.

Terrific Combat.

The 94th and 95th of the Line under Drouet followed close on their heels, mounted the height, and hastened down the other slope; while Murat, riding at the head of the 4th Hussars—the regiment in which Marshal Ney had made his debut as a private—charged the cavalry that turned upon him. At the first shock the 4th overthrew the Prussians; but they were reinforced by several fresh squadrons, and Murat sent for the 5th Chasseurs post haste, who coming up at the gallop flung their green and yellow ranks into the melee.

Tanenzien hurled his hussars and the red Saxon dragoons against the two regiments, and matters looked serious for Murat, although Captain Razout of the 94th opened from an ambuscade and killed fifty of them; but Maisons arriving with five companies of the 27th Leger poured in such a terrible fire that 200 red troopers went down in a mass and the rest bolted. These dragoons were antiquated-looking fellows, with cocked hats and pigtails, their officers riding with huge canes significantly dangling from wrist or saddle; and as they went about to the rear of the 4th Hussars and the 5th Chasseurs re-formed and spurred in pursuit, driving them into the woods among their disorganized infantry.

a height. While Bernadotte, who commanded, was reconneitring, Napoleon upon the Prussians—who left 2,000 muskets behind them in their flight, nearly 500 prisoners, and 300 killed and wounded—was serious.

Murat still pushed on, and next day, the 10th, Lasalle captured the enemy's baggage, and a pontoon train, Napoleon writing that the cavalry "was saddled in gold;" but on the same day a much more important engagement took place at Saalfeld between the French left, under Marshal Lannes, and Prince Louis, who commanded Hohenlohe's rear-guard. Saalfeld was a little walled town of about 5,000 inhabitants, and partly to allow time for the evacuation of the magazines in its rear, partly from a burning desire to fight, Prince Louis obtained Hohenlohe's permission to remain there.

A Strong Character.

He was then thirty-four, brave as a lion, but insubordinate, and of very loose morals. In Prussia he is regarded as a hero, and there is something in his oval face as it hangs in the Hohenzollern Museum with the hair tied with a ribbon, that reminds one of the English "Prince Charlie." He had eighteen guns, eighteen squadrons of hussars, and eleven battalions of infantry; and with that force he rashly engaged the experienced Lannes, who was advancing with 25,000 troops, although in effect only the artillery, two regiments of cavalry, and the division of Suchet came into action. The division of Suchet found itself before the enemy at 7 o'clock in the morning.

Instantly ranging his guns on the heights that commanded the Prussians, Lannes opened fire, and sent part of Suchet's skirmishers through the woods to gall Prince Louis' right. Until

nearly I o'clock the Prussians stood their ground, but Suchet working round in their rear and Lannes pouring down upon them in front, they broke and fled, leaving fifteen guns behind them.

Two Gallant Charges.

Louis charged gallantly with two cavalry regiments flanked by the white-uniformed Saxon Hussars, but Claparede's and Vedel's brigades routed them, and they also retreated. Rallying them with difficulty, he charged again at the head of the Saxon Hussars, whose tall flowerpot shakoes and bright blue pelisses were soon jumbled together in a confused mass among the willow-fringed marshes by the river bank, where the scarlet and blue 9th, and the light blue 10th Hussars made short work of them.

So far the French advance had been a succession of triumphs, destined to continue without rebuff for the rest of the war; and as the Prussian spirit sank at the news of each defeat, that of the invaders rose. Reviewing the 2d Chasseurs-a-Cheval at Lobenstein on the 12th of October, Napoleon asked Colonel Bousson how many men he had present.

"Five hundred, sire," said the colonel; but there are many raw troops among them."

"What does that signify? Are they not all Frenchmen?" was the angry reply; and turning to the regiment, he cried, "My lads, you must not fear death: when soldiers defy death they drive him into the enemy's ranks," with a motion of his arm which called forth a sudden convulsive movement among the squadrons and a wild shout of enthusiasm.

The losses of the Prussians at Saal-feld, which are variously stated seemed to have been about thirty guns, a thousand prisoners, and a similar number of killed and wounded, together with a quantity of baggage; but these were only the shadows of coming events, and the French columns moved on swiftly, learning by the capture of the post-bag that the enemy were moving on Weimar from Erfurt.

Fled in Disorder.

Hohenlohe's troops were ordered to place the hills and forests of Thuringia between them and the victorious foe, and, worn out by marching, were struggling on in the midst of wagontrains, and bad roads, when fugitives from Saalfeld spread terror among them, and they fled in disorder across the Saale into Jena. Napoleon likewise concentrated his troops, and a map must be studied to understand their movements in and among towns and villages unknown outside the history of this campaign.

A strong barrier now intervened between the two armies, French and Prussian, the river Saale flowing, roughly, northward to the Elbe through hilly country, and only passable to an army at five points where there were bridges—viz., at Jena, Lobstadt, Dornburg, Camburg, and Koser, the latter place opposite Nanmburg.

The Prussians having gone helterskelter across that river at Jena, they were virtually hemmed in an angle, formed by the Thuringian Mountains to the south and the Saale to the west, so that as their fortresses, their remaining magazines, and their very capital lay open to the enemy, they had but two alternatives—either to make another long flank march to the line of the Elbe or to stay where they were and defend the Saale and its fringe of hills.

The Duke of Brunswick, however, seems to have had a genius for keeping himself out of harm's way; and leaving Hohenlohe to defend the heights of Jena, though with strict orders not to attack, and Ruchel to collect the outlying forces at Weimar, he set off with his five divisions, bag and baggage, to pass the Saale at Naumburg and reach the line of the Elbe, hastened in this fatal decision by the news of Davout's advance on Naumburg—in other words, he ran away with 65,000 men and left others to do the fighting.

Grim Surprises.

On the 13th of October the army started—ominous date for the superstitiously inclined; and on the same day Napoleon, expecting to find the entire enemy before him, set out from Gera for Jena, having despatched Montesquieu, one of his officers of ordinance, to the King of Prussia with proposals of peace—in reality to gain time for his troops to come up. It was, to a great extent, a game of cross-purposes; for Brunswick, anticipating a free passage at Naumburg, found Davout and death; Napoleon, expecting the whole Prussian army beyond Jena, found only its rear-guard; and Hohenlohe, looking for Lannes and Augerean, received the full weight of the Emperor himself with the bulk of his forces.

Lannes preceded the Emperor, and had a sharp skirmish with Tauenzien beyond the little university town of Jena, and when Napoleon arrived some of the quaint gabled houses were burn-

ing—ignited, it is said, by the Prussian batteries. Jena nestles under the lea of a range of hills, the most important being the Landgrafenberg; and the high road to Weimar runs through a difficult valley named the Muhlthal from the paper-mill which stood there.

A Saxon Parson.

Having no mind to force that defile, which determined men might have rendered a veritable Thermopylæ, the Emperor made a reconnaissance with Lannes under fire to find some means of carrying the army over the hills on to the plateau beyond, where he should find the Prussians and a natural battleground. Lannes's tirailleurs had captured a pass, but it was useless for artillery; and it was a Saxon parson, exasperated at the sight of the burning town, who pointed out a path on the Landgrafenberg itself, by which, with the help of the sappers, the French could get up their guns. For this action the worthy man endured such after persecution that he was obliged to leave the country and reside in Paris.

How they cut away the rock and hauled each cannon to the summit with teams of twelve horses apiece, how the battery that was to open fire next morning stuck fast in the dark and was assisted by Napoleon with a lantern in his hand, is well known. During the long, cold night the Prussian bivouac fires lit up the horizon beyond the hilltops, but those of the French army made only a faint gleam high up on the crest of the mountain, and the enemy saw nothing to warn them that 40,000 men were tightly packed there, the crossbelts of one almost touching the cowskin pack of his front rank.

Suchet's division lay waiting for dawn with its right on the Rauhthal ravine; Gazan lurked on the left before the village of Cospoda, 4,000 of the Guard formed a huge square, in the centre of which the Emperor snatched a short repose, and the engineers were busy widening the Steiger path for the passage of the guns.

The Capitaine Cogniet, then a private in the Grenadiers of the Guard, has told us how twenty men per company were allowed to descend into the narrow streets of the deserted town below them to search for food; how they found it in plenty, together with good wine in the cellars of the hotels, each grenadier bringing back three bottles, two in his fur cap, and one in his pocket, with which they drank to the health of the King of Prussia; how they imbibed hot wine all night, carrying it to the artillery, who were half-dead with fatigue; and-ingenuous Cogniet!-confessing that the Guard up on the mountain side were all more or less elevated in a double sense.

Shrouded in Fog.

At last the morning came, but with it a fog so thick that the enemy were invisible. Napoleon had been astir at four o'clock, and having sent his final orders to his marshals, issued from the curtains of his blue and white striped tent, and passed before Lannes's corps by torchlight.

"Soldiers," said he, "the Prussian army is turned as the Austrian was a year ago at Ulm. Fear not its renowned cavalry; oppose to their charges firm squares and the bayonet."

The cheers of the soldiers still carried no warning to the Prussian lines. Their

hussars had intercepted Montesquieu during the night, and arguing from his message of peace that there would be no fighting on the 14th, the army had made no provision even for the day's rations, and lay in the fog in fancied security.

Then, about six, when the mist lightened, came a rude awakening. The 17th Leger, and a chosen battalion, under Claparede, crept forward in single line, flanked by the 34th and 40th in close column, commanded by Reille, with the 64th and 88th, under Vedel, in their rear—in short, Suchet's division making silently for Closwitz, while Gazan felt his way towards Cospoda on Suchet's left.

Fire from Ambush.

With Gazan were the 21st Leger, and the 28th, 100th, and 103d of the Line, and the two divisions enveloped in the fog drew nearer and nearer to the unsuspecting foe until, after they had groped their way for nearly an hour, Claparede suddenly received the fire of Zweifel's Prussian battalion and the Saxon ones of Frederick Augustus and Rechten, seeing only the flash of musketry from the wood that surrounded Closwitz. The 17th returned the fire warmly, firing into the vapor before them, but when they saw the trees looming up in front, Claparede charged and bayoneted them out of the wood and village.

Gazan was also successful in his attack on Cospoda, and, advancing farther, took the hamlet of Lutzenrode from the enemy's fusileiers; but a withering fire was soon opened on both divisions by Cerrini's Saxons, which they sustained for some time until the 34th, which had

relieved the 17th, went at them with the bayonet and put them to flight, a disorder which carried the rest of Tauenzien's corps away, leaving twenty cannon and a host of fugitives in the hands of Lannes, who followed at a swinging pace down hill after the cowards.

In less than two hours they had cleared their front for the army on the heights to deploy. A lull came about nine o'clock, and before the action was resumed Ney had arrived at speed; Soult with one division took post behind Closwitz; and Augereau, who was then lamenting the loss of his amiable wife, after pushing Heudelet, his guns, and cavalry along the Muhlthal towards Weimar, left the Gibbet Hill with Desjardin and placed himself on Gazan's left among the fine fir woods that clothed the plateau.

Preparing for Action.

The mist was rising and promised to break, but it was yet some time before the sun shone brightly. Prince Hohenlohe, whom disaster seemed to pursue, galloped to his troops, who were encamped on the Weimar road awaiting the French left wing as they thought, where Tauenzien's fugitives soon alarmed him, and called forth his better qualities to prepare for a general action.

Hurrying the Prussian infantry under Grawert to occupy Tauenzien's lost positions, he posted two Saxon brigades under Burgsdorf and Nehroff, Boguslauski's Prussian battalion, and a strong force of artillery to hold the Weimar road to the death, with Cerrini, who had rallied and been reinforced by four Saxon battalions, in support.

Dyherrn, with five battalions, acted

as reserve to Grawert. Tauenzien was rallied a long way to the rear, and Holzendorf, who formed Hohenlohe's left, was ordered to attack the French right, while he himself should fall on their centre with cavalry and guns, pending the arrival of Ruchel from Weimar.

Ready for Onslaught.

The heights above Jena, the ravines, and the dense woods were capable of the most stubborn defence, and the French would have had to fight climbing; but the passage of the Landgrafenberg had altered everything, and as the sun shone out about ten o'clock Hohenlohe saw an astonishing spectacle. The enemy stretched in dark masses along the high ground on his own side of the mountain, outnumbering him in the proportion of two to one, outflanking him to left and right, and prepared to foam down the slope and sweep him off the face of the earth.

Nor did the foe allow him much time to digest the surprise; for the impetuous Ney, who had hurried forward with 3,000 men and deployed in the mist between Lannes and Augereau, flung himself upon the village of Vierzehn-Heiligen in the very centre of the battlefield, and anticipated the Emperor's orders for a renewal of the fight.

Soult with St. Hilaire's division advanced from Lobstadt and constituted the French right; Lannes, with Suchet and Gazan, formed the centre, and Augereau having scrambled out of the Muhlthal, menaced Iserstadt on the left; the Guard and the artillery being in rear, and Murat's cavalry marching to join the army. Indignant at the firing in his front, Napoleon sent to learn from which corps it proceeded,

and was greatly astonished to find that Ney, whom he supposed to be still in the rear, was engaging on his own account.

Ney's troops were the 25th Leger under Colonel Morel, two battalions formed of the picked men of several regiments, and Colbert's light cavalry brigade, formed of the 3d Hussars and 10th Chasseurs-a-Cheval; and with these the marshal attacked Hohenlohe with his usual bravery, leading them, as his aide-de-camp tells us, "like a coporal of the line." Hohenlohe's horse-artillery was in position, and the 10th Chasseurs, forming under cover of a little wood, darted out upon it, and took seven guns in one swoop under a fearful fire; but while they were sabring away, the Prussian cuirassiers of Holzendorf and Prittzwitz's dragoous came down with a thunderous rush, and the 10th went about.

A Hard Struggle.

The 3d Hussars, forming behind the same trees, spurred on the Prussian flank and checked the cuirassiers for a moment, but had to retreat in their turn; and Ney, throwing his infantry into two squares, found himself in a bad case at the moment when Napoleon reached a height overlooking the conflict. Sending Bertrand to Ney's assistance with two light cavalry regiments, he ordered up Lannes; and the gallant Ney made a heroic struggle to hold his own, pushing his grenadiers to the clump of trees that had sheltered his horsemen, and flinging his riflemen at Vierzehn-Heiligen itself.

Up came Lannes at the head of the 21st Leger, and as Grawert deployed before the village in magnificent order,

opening a terrible fire, Lannes led five of Claparede's and Gazan's regiments to outflank him. In every part of the field the crash of musketry and the boom of heavy cannon resounded. Napoleon still believed he had the entire Prussian army before him, and the stubborn resistance justified that opinion.

Scene of Carnage.

The Prussian regiments of Zathow and Lanitz covered themselves with glory before Vierzehn-Heiligen. The cuirassiers were true to their traditions of Seidlitz and the Seven Years' War; but inch by inch the French gained ground, although it was an hour after midday before they obtained a permanent advantage. Hares fled terrified about the stubble fields, the soldiers cheering them as they fought. The October woods were strewn with dead men among the fallen leaves, and the hollow ways were full of smoke.

Thanks to the Prussian horse, Hohenlohe took some guns, and his hopes were so far raised that he wrote to Ruchel, "At this moment we beat the enemy at all points." He soon learned, however, that Soult had almost annihilated his left wing, and Augereau and Lannes under his own eyes drove back his right more than half a mile.

The brave man appeared everywhere at once; now heading his cuirassiers, now encouraging the infantry, again peering through the clouds that hung before the batteries; but it was all to no purpose. Grawert was badly wounded, Dyherrn's five battalions fled before Augereau, and with a tremendous rolling of drums the whole French army advanced down the slope, the Guard included, about two in the afternoon.

Hohenlohe's next letter to Ruchel was significant. "Lose not a moment in advancing with your as yet unbroken troops. Arrange your columns so that through your openings there may pass the broken bands of the battle." In vain Ruchel arrived at last with 20,000 men; Soult fell upon him and they made poor stand, the growing rout already communicating itself to the new-comers.

The French musicians played under the heavy fire; Ruchel was seriously hurt; Hohenlohe's own regiment and the grenadiers of Hahn gave way; and, most terrible of all, Murat and his cavalry came on the scene and overwhelmed everything in a whirlwind of slaughter.

Thousands of Bloody Swords.

No battle can show a carnage more merciless and horrible than that surge of heavy horsemen among the flying Prussians after Jena. They spared nothing in their path, and every one of those fifteen thousand long swords was red with blood from point to hilt.

Ruchel's men had the double misfortune to meet both the victorious French and their flying countrymen in a disorganized mass rolling down hill, and though here and there individual battalions fought bravely to the last, panic seized the whole army and it tore madly to the rear.

Brown-and-gold hussars of Anhalt Pless; light infantry in green jackets piped with red; white Saxon hussars and grim dragoons with the bristle taken out of their moustaches, all mingled in a shocking, terror-stricken mob, covering the roads and fields for miles; Murat's cuirassiers and dragoons

slashing and slaying until compelled to halt from very weariness.

Many colors were taken in that pursuit, and two curious incidents are worthy of record: Quartermaster Humbert of the 2d Dragoons captured a standard, but was killed by three musket-balls, seeing which the dragoon Fauveau leaped to the ground, rescued the prize, and carrying it to his colonel under a hail of shot, said modestly, "It was the Quartermaster Humbert who took this flag," for which he received the Cross the same day.

The other instance was that of Colonel Doullembourg of the 1st Dragoons, who was unhorsed and momentarily captured, in the confusion his name appearing in the bulletin as killed.

"It is not worth the trouble of altera- ministered brandy with tion," said Berthier when he protested; to many of the wounded.

and, oddly enough, the mistake was still further perpetuated after the Polish campaign; for certain squares and streets of Paris being named after the officers who fell at Jena, a Rue Doullembourg came into existence, and again the colonel protested.

"What!" said Berthier, "would you have me give back to the Emperor an order so honorable to you? No; live in the Rue Doullembourg and establish your family there."

Napoleon returned to Jena for the night, where he received the professors of the university, and rewarded the Saxon clergyman to whom he owed so much; and there he composed the Fifth Bulletin, one of the most mendacions of his productions. It is also recorded that he crossed the battle-field and administered brandy with his own hands to many of the wounded.

CHAPTER XXIII.

Brilliant Victories of Commodore Perry and General Jackson.

HE famous battle fought by Commodore Perry on Lake Erie, resulting in a victory for the American Navy, ranks as one of the great naval achievements of the Nineteenth Century. It had a decisive effect upon the struggle with Great Britain, then going on, and hastened the close of the second war with the mother country.

Perry's celebrated battle was fought September 10th, 1813, and raised to a high pitch the spirits of the Americans, who were disheartened by repeated disasters. The British had six ships, with sixty-three guns. The Americans had nine ships, with fifty-four guns, and the American ships were much smaller than the English. At this time Perry, the American commander, was but twenty-six years of age. His flagship was the Lawrence. The ship's watchword was the last charge of the Chesapeake's dving commander-"Don't give up the ship." The battle was witnessed by thousands of people on shore.

At first the advantage seemed to be with the English. Perry's flagship was riddled by English shot, her guns were dismounted and the battle seemed lost. At the supreme crisis Perry embarked in a small boat with some of his officers, and under the fire of many cannon passed to the Niagara, another ship of the fleet, of which he took command.

After he had left the Lawrence she hauled down her flag and surrendered,

but the other American ships carried on the battle with such fierce impetuosity that the English battle-ship in turn surrendered, the Lawrence was retaken and all the English ships yielded with the exception of one, which took flight. The Americans pursued her, took her and came back with the entire British squadron. In the Capitol at Washington is a historical picture, a copy of which is here inserted, showing Perry's famous exploit in passing from one ship to another under the fire of the enemy.

The reader will be especially interested in obtaining a detailed account of Perry's brilliant tactics in this famous sea-fight.

Perry's squadron was lying at Putin-Bay on the morning of the 10th of September, when, at daylight, the enemy's ships were discovered at the northwest from the masthead of the Lawrence. A signal was immediately made for all the vessels to get under way. The wind was light at the south west, and there was no mode of obtaining the weather-gauge of the enemy, a very important measure with the peculiar armament of the largest of the American vessels, but by beating round some small islands that lay in the way.

It being thought there was not sufficient time for this, though the boats were got ahead to tow, a signal was about to be made for the vessels to ware, and to pass to leeward of the islands, with an intention of giving the enemy

this great advantage, when the wind shifted to southeast. By this change the American squadron was enabled to pass in the desired direction, and to gain the wind.

When he perceived the American vessels clearing the land, or about 10 A. M., the enemy hove to, in a line, with his ships' heads to the southward and westward. At this time the two squadrons were about three leagues asunder, the breeze being still at southeast, and sufficient to work with.

Change of Plans.

After standing down until about a league from the English, where a better view was got of the manner in which the enemy had formed his line, the leading vessels of his own squadron being within hail, Captain Perry communicated a new order of attack. had been expected that the Queen Charlotte, the second of the English vessels, in regard to force, would be at the head of their line, and the Niagara had been destined to lead in, and to lie against her, Captain Perry having reserved for himself a commander's privilege of engaging the principal vessel of the opposing squadron; but, it now appearing that the anticipated arrangement had not been made, the plan was promptly altered.

Captain Barelay had formed his line with the Chippeway, Mr. Campbell, armed with one gun on a pivot, in the van; the Detroit, his own vessel, next; and the Hunter, Lieutenant Bignal; Queen Charlotte, Captain Finnis; Lady Prevost, Lieutenant Commandant Buchan; and the Little Belt astern, in the order named. To oppose this line, the Ariel, of four long twelves, was stationed

in the van, and the Scorpion, of one long and one short gun on circles, next her. The Lawrence, Captain Perry, came next; the two schooners just mentioned keeping on her weather bow, Laving no quarters. The Caledonia, Lieutenant Turner, was the next astern, and the Niagara, Captain Elliot, was placed next to the Caledonia.

These vessels were all up at the time, but the other light craft were more or less distant, each endeavoring to get into her berth. The order of battle for the remaining vessels directed the Tigress to fall in astern of the Niagara, the Somers next, and then the Porcupiue and Trippe in the order named.

Array of English Ships.

By this time the wind had got to be very light, but the leading vessels were all in their stations, and the remainder were all endeavoring to get in as fast as possible. The English vessels presented a very gallant array, and their appearance was beautiful and imposing. Their line was compact, with the heads of the vessels still to the southward and westward; their ensigns were just opening to the air; their vessels were freshly painted, and their canvas was new and perfect. The American line was more straggling. The order of battle required them to form within half a cable's length of each other, but the schooners astern could not close with the vessels ahead, which sailed faster, and had more light canvas until some considerable time had elapsed.

A few minutes before twelve, the Detroit threw a twenty-four-pound shot at the Lawrence, then on her weather quarter, distance between one and two miles. Captain Perry now passed an

order by trumpet, through the vessels astern, for the line to close to the prescribed order; and soon after the Scorpion was hailed and directed to begin with her long gun.

At this moment the American vessels in line were edging down upon the English, those in front being necessarily nearer to the enemy than those more astern, with the exception of the Ariel and Scorpion, which two schooners had been ordered to keep well to the windward of the Lawrence.

Brisk Firing.

As the Detroit had an armament of long guns, Captain Barclay manifested his judgment in commencing the action in this manner; and in a short time the firing between that ship, the Lawrence, and the two schooners at the head of the American line got to be very animated. The Lawrence now showed a signal for the squadron to close with each vessel in her station, as previously designated. A few minutes later the vessels astern began to fire, and the action became general, but distant. The Lawrence, however, appeared to be the principal aim of the enemy, and before the firing had lasted any material time the Detroit, Hunter and Oueen Charlotte were directing most of their efforts against her.

The American brig endeavored to close, and did succeed in getting within reach of canister, though not without suffering materially, as she fanned down upon the enemy. At this time the support of the two schooners ahead, which were well commanded and fought, was of the greatest moment to her; for the vessels astern, though in the line, could be of little use in diverting the

fire, on account of their positions and the distance.

After the firing had lasted some time, the Niagara hailed the Caledonia, and directed the latter to make room for the former to pass ahead. Mr. Turner put his helm up in the most dashing manner, and continued to near the enemy, until he was closer to his line, perhaps, than the commanding vessel; keeping up as warm a fire as his small armament would allow. The Niagara now became the vessel next astern of the Lawrence.

The cannonade had the usual effect of deadening the wind, and for two hours there was very little air. During all this time, the weight of the enemy's fire was directed against the Lawrence; the Queen Charlotte having filled, passed the Hunter and closed with the Detroit, where she kept up a destructive cannonading on this devoted vessel. These united attacks dismantled the American brig, besides producing great slaughter on board her.

Movements of Battleships.

At the end of two hours and a half, agreeable to the report of Captain Perry, the enemy having filled, and the wind increasing, the two squadrons drew slowly ahead, the Lawrence necessarily falling astern and partially out of the combat. At this moment the Niagara passed to the southward and westward, a short distance to windward of the Lawrence, steering for the head of the enemy's line, and the Caledonia followed to leeward.

The vessels astern had not been idle, but, by dint of sweeping and sailing, they had all got within reach of their guns, and had been gradually closing, though not in the prescribed order. The rear of the line would seem to have inclined down towards the enemy, bringing the Trippe, Lieutenant Holdup, so near the Caledonia, that the latter sent a boat to her for a supply of cartridges.

Captain Perry, finding himself in a vessel that had been rendered nearly useless by the injuries she had received, and which was dropping out of the combat, got into his boat, and pulled after the Niagara, on board of which vessel he arrived at about half-past two. Soon after the colors of the Lawrence were hauled down, that vessel being literally a wreck.

Getting into Closer Action.

After a short consultation between Captains Perry and Elliott, the latter volunteered to take the boat of the former, and to proceed and bring the small vessels astern, which were already briskly engaged, into still closer action. This proposal being accepted, Captain Elliott pulled down the line, passing within hail of all the small vessels astern, directing them to close within half-pistol shot of the enemy, and to throw in grape and canister, as soon as they could get the desired positions. He then repaired on board the Somers and took charge of that schooner in person.

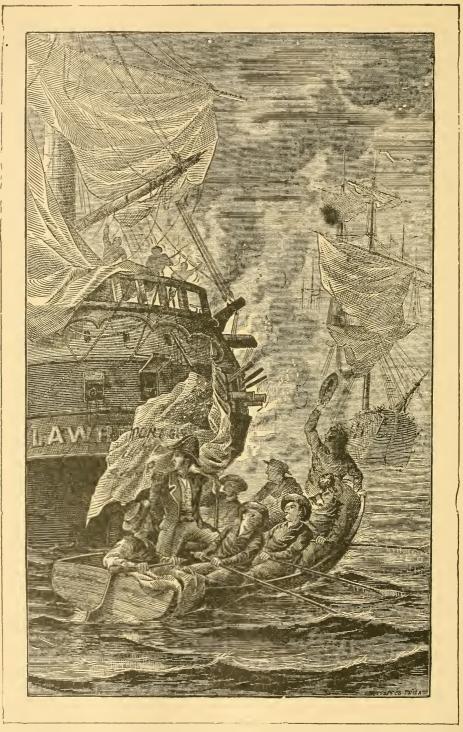
When the enemy saw the colors of the Lawrence come down, he confidently believed that he had gained the day. His men appeared over the bulwarks of the different vessels and gave three cheers. For a few minutes, indeed, there appears to have been, as if by common consent, nearly a general cessation in the firing, during which both parties were preparing for a desperate and final effort. The wind had freshened and the position of the Niagara, which brig was now abeam of the leading English vessel, was commanding; while the gun-vessels astern, in consequence of the increasing breeze, were enabled to close very fast.

Rousing Cheers.

At forty-five minutes past two, or when time had been given to the gunvessels to receive the order mentioned, Captain Perry showed the signal from the Niagara, for close action, and immediately bore up, under his foresail, topsails, and topgallantsail. As the American vessels hoisted their answering flags, this order was received with three cheers, and it was obeyed with alacrity and spirit.

The enemy had attempted to ware round, to get fresh broadsides to bear, in doing which his line got into confusion, and the two ships for a short time were foul of each other, while the Lady Prevost had so far shifted her berth, as to be both to the westward and to the leeward of the Detroit. At this critical moment, the Niagara came steadily down, within half pistol-shot of the enemy, standing between the Chippeway and Lady Prevost, on one side, and the Detroit, Queen Charlotte and Hunter on the other. In passing she poured in her broadsides, starboard and larboard, ranging ahead of the ships, luffed athwart their bows, and continued delivering a close and deadly fire.

The shrieks from the Detroit, proclaimed that the tide of battle had turned. At the same moment, the gunvessels and Caledonia were throwing in close discharges of grape and canister



Perry passing in an open boat through the thick of the fight. $356\,$

astern. A conflict so fearfully close, and so deadly, was necessarily short. In fifteen or twenty minutes after the Niagara bore up, a hail was passed among the small vessels, to say that the enemy had struck, and an officer of the Queen Charlotte appeared on the taffrail of that ship, waving a white hand-kerchief, tied to a boarding-pike.

Trying to Escape.

As soon as the smoke cleared away the two squadrons were found partly intermingled. The Niagara lay C leeward of the Detroit, Queen Charlotte and Hunter; and the Caledonia, with one or two of the gun-vessels, was between the latter and the Lady Prevost. On board the Niagara the signal for close action was still abroad, while the small vessels were sternly wearing their answering flags. The Little Belt and Chippeway were endeavoring to escape to leeward, but they were shortly after brought-to by the Scorpion and Trippe; while the Lawrence was lying astern and to windward, with the American colors again flying. The battle had commenced about noon, and it terminated at three, with the exception of a few shots fired at the two vessels that attempted to escape, which were not overtaken until an hour later.

In this decisive action, so far as their people were concerned, the two squadrons suffered in nearly an equal degree, the manner in which the Lawrence was cut up being almost without an example in naval warfare. It is understood that when Captain Perry left her she had but one gun on her starboard side, or that on which she was engaged, which could be used; and that gallant officer is said to have aided in firing it

astern. A conflict so fearfully close, in person the last time it was disand so deadly, was necessarily short. charged.

Of her crew, 22 were killed and 61 were wounded, most of the latter severely. When Captain Perry left her, taking with him his own brother and six of his people, there remained on board but 14 sound men. The Niagara had 2 killed and 25 wounded; or about one-fourth of all at quarters. This was the official report; but, according to the statement of the surgeon, her loss was 5 killed and 27 wounded.

Total Loss.

The other vessels suffered relatively less. The total loss of the squadron was 27 killed and 96 wounded, or altogether, 123 men; of whom 12 were quarter-deck officers. More than a hundred men were unfit for duty, among the different vessels, previous to the action, cholera morbus and dysentery prevailing in the squadron. Captain Perry himself was laboring under debility, from a recent attack of the lake fever, and could hardly be said to be in proper condition for service when he met the enemy; a circumstance that greatly enhances the estimate of his personal exertions on this memorable occasion.

For two hours the weight of the enemy's fire had been thrown into the Lawrence, and the water being perfectly smooth his long guns had committed great havoc, before the carronades of the American vessels could be made available. For much of this period it is believed that the efforts of the enemy were little diverted, except by the fire of the two leading schooners, a gun of one of which (the Ariel) had early bursted, the two long guns of the

large brigs, and the two long guns of the Caledonia.

Although the enemy undoubtedly suffered by this fire, it was not directed at a single object, as was the case with that of the English, who appeared to think that by destroying the American commanding vessel they would conquer. It is true that carronades were used on both sides, at an earlier stage of the action than that mentioned, but there is good reason for thinking that they did but little execution for the first hour. When they did tell, the Lawrence—the vessel nearest to the enemy, if the Caledonia be exceptednecessarily became their object, and, by this time, the efficiency of her own battery was much lessened.

Shot Passed Through.

As a consequence of these peculiar circumstances, her starboard bulwarks were nearly beaten in, and even her larboard were greatly injured, many of the enemy's heavy shot passing through both sides, while every gun was finally disabled in the batteries fought. Although much had been justly said of the manner in which the Bon Homme Richard and the Essex were injured, neither of those suffered, relatively, in a degree proportioned to the Lawrence.

Distinguished as were the two former vessels for the indomitable resolution with which they withstood the destructive fire directed against them, it did not surpass that manifested on board the latter; and it ought to be mentioned that throughout the whole of this trying day her people, who had been so short a time acting together, manifested a steadiness and a discipline worthy of veterans.

Although the Niagara suffered in a much less degrees, 27 men killed and wounded, in a ship's company that mustered little more than 100 souls at quarters, under ordinary circumstances would be thought a large proportior. Neither the Niagara nor any of the smaller vessels were injured in an unusual manner in their hulls, spars and sails, the enemy having expended so much of his efforts against the Lawrence, and being so soon silenced when that brig and the gun-vessels got their ranking positions at the close of the conflict.

Heavy Casualties.

The injuries sustained by the English were more divided, but were necessarily great. According to the official report of Captain Barclay, his vessels lost 41 killed and 94 wounded, making a total of 135, including twelve officers, the precise number lost by the Americans. No report has been published in which the loss of the respective vessels was given; but the Detroit had her first lieutenant killed, and her commander, Captain Barclay, with her purser, wounded. Captain Finnis, of the Queen Charlotte, was also slain, and her first lieutenant was wounded.

The commanding officer and first lieutenant of the Lady Prevost were among the wounded, as were the commanding officers of the Hunter and Chippeway. All the vessels were a good deal injured in their sails and hulls; the Queen Charlotte suffering most in proportion. Both the Detroit and Queen Charlotte rolled the masts out of them, at anchor at Put-in-Bay, in a gale of wind, two days after the action.

It is not easy to make a just comparison between the forces of the hostile squadrons on this occasion. In certain situations the Americans would have been materially superior, while in others the enemy might possess the advantage in perhaps an equal degree. In the circumstances under which the action was actually fought, the peculiar advantages and disadvantages were nearly equalized, the lightness of the wind preventing either of the two largest of the American vessels from profiting by its peculiar mode of efficiency, until quite near the close of the engagement, and particularly favoring the armament of the Detroit; while the smoothness of the water rendered the light vessels of the Americans very destructive as soon as they could be got within a proper range.

Long Guns in Action.

The Detroit has been represented on good authority, to have been both a heavier and stronger ship than either of the American brigs, and the Queen Charlotte proved to be a much finer vessel than had been expected; while the Lady Prevost was found to be a large, warlike schooner. It was, perhaps, unfortunate for the enemy, that the armaments of the two last were not available under the circumstances which rendered the Detroit so efficient, as it destroyed the unity of his efforts.

In short, the battle for near half of its duration appears to have been fought, so far as efficiency was concerned, by the long guns of the two squadrons. This was particularly favorable to the Detroit and to the American gun-vessels; while the latter fought under the advantages of smooth water and the

disadvantages of having no quarters. The sides of the Detroit, which were unusually stout, were filled with shot that did not penetrate.

Brave Officers.

Captain Perry, in his report of the action, eulogized the conduct of his second in command, Captain Elliott; that of Mr. Turner, who commanded the Caledonia; and that of the officers of his own vessel. He also commended the officers of the Niagara, Mr. Packett of the Ariel, and Mr. Champlin of the Scorpion. It is now believed that the omission of the names of the commanders of the gun-vessels astern, was accidental. It would seem that these vessels, in general, were conducted with great gallantry.

Towards the close of the action, indeed, the Caledonia, and some of the gun-vessels, would appear to have been handled with a boldness, considering their total want of quarters, bordering on temerity. They are known to have been within hail of the enemy, at the moment he struck, and to have been hailed by him. The grape and canister thrown by the Niagara and the schooners, during the last ten minutes of the battle, and which missed the enemy, rattled through the spars of the friendly vessels, as they lay opposite to each other, raking the English ahead and astern.

Captain Perry was criticised at the time for the manner in which he had brought his squadron into action, it being thought he should have waited until his line was more compactly formed, and his small vessels could have closed. It has been said that "an officer seldom went into action worse,

or got out of it better." Truth is too often made the sacrifice of antithesis. The mode of attack appears to have been deemed by the enemy judicious, an opinion that speaks in its favor. The lightness of the wind, in edging down, was the only circumstance that was particularly adverse to the American vessels, but its total failure could not have been readily foreseen.

Clever Tactics.

The shortness of the distances on the lake rendered escape so easy, when an officer was disposed to avoid a battle, that no commander, who desired an action, would have been pardonable for permitting a delay on such a plea. The line of battle was highly judicious, the manner in which the Lawrence was supported by the Ariel and Scorpion being simple and ingenious.

By steering for the head of the enemy's line the latter was prevented from gaining the wind by tacking, and when Captain Elliott imitated this manœuvre in the Niagara, the American squadron had a very commanding position, of which Captain Perry promptly availed himself. In a word, the American commander appears to have laid his plan with skill and judgment, and in all in which it was frustrated it would seem to have been the effect of accident. His end was fully obtained and resulted in a triumph.

The British vessels appear to have been gallantly fought, and were surrendered only when the battle was hopelessly lost. The fall of their different commanders was materially against them, though it is not probable the day could have been recovered after the Niagara gained the head of their line

and the gun vessels had closed. If the enemy made an error it was in not tacking when he attempted to ware, but it is quite probable that the condition of his vessels did not admit of the former manœuvre.

There was an instant when the enemy believed himself the conqueror, and a few minutes even, when the Americans doubted; but the latter never despaired; a moment sufficed to change their feelings, teaching the successful the fickleness of fortune, and admonishing the depressed of the virtue of perseverance.

For his conduct in this battle, Captain Perry received a gold medal from Congress. Captain Elliott also received a gold medal. Rewards were bestowed on the officers and men generally, and the nation has long considered this action one of its proudest achievements on the water.

Glory for Our Navy.

It is not too much to say that this renowned victory on Lake Erie has done more than any other one event to give that high prestige to the American Navy which has been accorded to it for so long a time. Every great sea battle must be fought, not merely with guns and powder, but with brains. There must be planning, strategy, manœuvring, sometimes swift and complicated, and all this is the work of the head. Next comes the bravery, the fiery dash, that turns the onset into victory.

It is not a little remarkable that the American nation, which, so far as commerce is concerned, has never claimed to be mistress of the seas, should have had a navy whose exploits from first to last have been the surprise and wonder of the world.

During the year following the great battle of Lake Erie was fought one of the most important land and naval battles of the century.

At the western end of Jamaica is Negril Bay, a wide, safe and convenient anchorage. There, on the 24th of November, 1814, was assembled one of the most imposing and efficient combined naval and military forces that Great Britain has ever sent across the Atlantic. More than fifty ships were there, most of them men-of-war, and the remainder transports. The men-of-war included many vessels of the largest size, and their commanders numbered amongst them the most renowned and trusted English officers.

Renowned Commanders.

Sir Alexander Cochrane's flag was Loisted on the 80-gun Tonnant, and he had with him Rear-Admiral Malcolm in the 74, Royal Oak. Sir Thomas Hardy —Nelson's Hardy—was in the Ramilis, and Sir Thomas Trobridge was in the Armide. Many others there were, scarcely less well known to fame and fresh from the great deeds which had given to England the undisputed sovereignty of the seas. The decks of the fleet were crowded with soldiers. The 4th, 44th, 85th, and the 21st Regiments, with a proportion of artillery and sappers, had come from North America, where they had fought the battle of Bladensburg, burned the public buildings of Washington, and lost in action their general -the gallant Ross-during the past summer.

These had just been joined by the 93rd Highlanders, six companies of the 95th Rifles, two West India Regiments, two squadrons of the 14th Dra-

goons (dismounted), with detachments of artillery and engineers, and recruits for the regiments which had been already campaigning in America. The whole probably formed an army of about 6,000 men, though of them is could not be said that above 4,400 were troops on which a general could thoroughly depend, as the two West India Regiments, being composed of negroes, were not completely trustworthy, particularly if they were to be called upon to endure much exposure to cold in coming service.

Formidable Fleet.

Their leader was Major-General Keane, a young and dashing officer, who had been sent out from England to be second in command to General Ross, and who did not know till he reached Madeira on his voyage that, by Ross's lamented death, he had no senior. Other forces were also on their way, which would eventually join the great armament now in Negril Bay. A fleet from Bordeaux was still on the ocean, the naval squadron of Captain Percy was to effect a junction from Pensacola, and more ships were to come from England conveying a commanderin-chief.

The object with which so much warlike power had been collected had long been studiously kept secret, but at last it was known that a descent on Louisiana was intended, and that the first operation would be the capture of New Orleans. It was thought that the Government of the United States would be taken by surprise, that little or no resistance would be met with, and that the charges of the expedition would be more than covered by the large booty in cotton, sugar and other products which had not been able to leave the country during the course of the war while the seas were watched by English cruisers.

There was no longer delay at the place of rendezvous, and the great fleet got under weigh on the 26th November. Confidence was in every heart, and no forebodings of disaster clouded the anticipations of success which, as by second nature, came to soldiers and sailors accustomed to victory.

Loyalty was Doubtful.

New Orleans is built on the east bank of the Mississippi, the "father of waters," about eighty miles from its mouth. In 1814 its inhabitants numbered from 20,000 to 30,000, of whom the majority were French creoles, while the remainder were Spaniards and Americans, besides a floating multitude . of merchants, sailors and others who had been detained in the city and debarred from their usual avocations by the war. It was doubtful whether this population was loyal to the American Republic, of which it had only for a few years formed a part, and, indeed, if the defense of the town had fallen into less vigorous hands than it did, it is more than likely that serious disaffection might have showed itself.

The mighty flood of the Mississippi, bearing down with it a vast accumulation of detritus, had formed a great delta, and the waters themselves found their way to the Gulf of Mexico through many channels. Its main outlet was, however, the only one navigable for ships of any size, and this had at its mouth a constantly shifting bar, which was impassable for any craft

drawing over sixteen or seventeen feet of water. Besides the natural difficulties of the entrance to the river, it was further defended by a fort, strong in itself and almost impregnable by its position in the midst of impervious swamps.

Even supposing that an enemy should be able to pass the bar and the first fort, he would find that when he had ascended the river about sixty miles two other strong forts presented themselves, whose cross fire swept the channel, at a point, too, where the river makes a bend, and the sailing ships of the day had to wait for a change of wind to ensure their further progress.

No Place for Landing.

The banks of the river were composed of slimy morasses, rank with semi-tropical vegetation and intersected by bayous, or creeks, utterly impracticable for landing or for the march and manœuvring of troops. To the east of the swampy delta formed by the great river, a shallow sheet of open water stretched inland from the Gulf of Mexico, and was only divided from the Mississippi at its further extremity by a narrow neck of comparatively firm land, and on this neck was situated the town of New The open water near the Orleans. gulf was known as Lake Borgne, and, where it widened out eastward of the city, as Lake Pontchartrain.

The entire width of the neck of land between Lake Pontchartrain and the river might vary from eight to ten miles, but of this about two-thirds was reed-grown morass, while the remainder was occupied by cotton and sugar plantations, separated by strong railings and drained by numerous deep ditches or canals. The whole at certain seasons

of the year was below the level of the river, and was protected from inundation by high artificial dykes, or ramparts, called in Louisiana levees.

"Old Hickory,"

When the designs of the British armament became apparent, Major-General Jackson, of the Unite States army, an officer who had greatly distinguished himself in Indian wars, was entrusted with supreme command at the threatened point, and arrived at New Orleans on the 2d of December. As a man who made his mark in history, and who served his country well at a great crisis in her fortunes, his personal description is of peculiar interest:-" A tall, gaunt man, of very erect carriage, with a countenance full of stern decision and fearless energy, but furrowed with care and anxiety. His complexion was sallow and unhealthy, his hair was iron grey, and his body thin and emaciated, like that of one who had just recovered from a lingering and painful illness. But the fierce glare of his bright and hawk-like eye betrayed a soul and spirit which triumphed over all the infirmities of the body. His dress was simple and nearly threadbare. A small leather cap protected his head, and a short Spanish blue cloak his body, whilst his feet and legs were encased in high dragoon boots, long ignorant of polish or blacking, which reached to the knees. In age he appeared to have passed about forty-five winters."

Immediately on his arrival at New Orleans, General Jackson began making every arrangement for the defence of the town, inspecting and improving the river forts, reconnoitring the shores of Lake Borgne and Lake Pontchar-

train, fortifying and obstructing the bayous which gave a waterway to the near neighborhood of the town, and stimulating and encouraging the people. In truth he had apparently no easy task before him.

We have seen how mighty was the force arrayed against him, which was even now lying off the coast ready to advance in a wave of invasion. To oppose it he had at his immediate disposal only two newly-raised regiments of regular troops, a battalion of uniformed volunteers, two badly equipped and imperfectly-disciplined regiments of State militia—some of whose privates were armed with rifles, some with muskets, some with flowling-pieces, some not armed at all—and a battalion of free men of color, the whole amounting to between 2,000 and 3,000 fightingmen. Two small vessels of war lay in the river, but these were, so far, unmanned. There were also six gunboats on Lake Pontchartrain. Commodore Patterson was the senior naval officer, and he had few subordinates.

Hurrying to the Rescue.

Reinforcements were, however, on their way, and were strenuously pushing forward in defiance of the inclement season, swollen streams, nearly impassable roads, and scant supply of food and forage. General Coffee, with nearly 3,000 men, was coming from Pensacola. General Carroll was bringing a volunteer force from Tennessee, and Generals Thomas and Adair, at the head of 2,000 Kentuckians, were also on their way down the Mississippi to join in the defence of Kentucky's sister State. Such an army as—even when all should be assembled—General Jack-

son was to command would, to all seeming, have little chance in a ranged field against the highly-disciplined soldiery of England; but it had, for its greatest and most reliable advantage, the occupation of a position in the highest degree difficult of approach, and, when reached, capable by its nature of effectual resistance.

Fleet All There.

On December 8th the leading ships of the English fleet, which had left Negril Bay on November 26th, anchored off the Chandeleur Islands, which stud the gulf opposite to the entrance of Lake Borgne; and by the 12th the whole of the men-of-war and troopships had arrived. It had been recognized that to advance against New Orleans by the channel of the Mississippi was a task too difficult to be attempted, and Sir Alexander Cochrane and General Keane had determined to effect a landing on the shore of Lake Pontchartrain, and hoped, by pushing on at once, to be able to take possession of the town before effectual preparation could be made for its defence.

It has been said that Lake Borgne and Lake Pontchartrain were shallow; indeed, their depth varied from six to twelve feet. The troops were, therefore, transferred from the larger into the lighter vessels, and on the 13th were prepared to enter upon the transit of the land-locked waters. They had not proceeded far, however, when it became apparent that the American gunboats which occupied the lake were prepared to offer resistance to the movement, and, until that resistance could be removed, no disembarkation could be attempted.

The gunboats, with their light draught of water, could bid defiance to even the lightest vessels of the English fleet, which could not float where they sailed. They could only be reached by ship's launches and barges rowed by seamen, and a flotilla combined under Captain Luckier of the Navy was at once prepared for the enterprise. boats pushed off, and by noon came in sight of the foe, who would willingly have retreated and given their attackers long and weary toil in their approach, but that, the morning breeze having died away, they were compelled perforce to fight at anchor in line moored fore and aft. Captain Lockier resolved to refresh his men before he commenced the action, and dropping his grapuels just out of reach of the enemy's guns, allowed his crews to eat their dinner.

Brilliant Fighting.

After an hour's repose the boats again got ready to advance, and, with a hearty cheer, they moved steadily in a long line. Then began one of those brilliant boat actions in which some of the best qualities of the English sailors so often showed themselves. The American guns opened, and a hail of balls was showered on Captain Lockier's flotilla. One or two boats were sunk, others disabled, and many men were killed and wounded. But the English carronades returned the fier, and, as the determined, stalwart rowers gradually closed with the Americans, the marines were able to open a deadly discharge of musketry.

A last powerful effort, the gunboats were reached, and, cutlass in hand, the bluejackets sprang up their sides. The resistance was stern and unyielding, worthy of the American Republic. Captain Lockier received several severe wounds, but, fighting from stem to stern, the boarders at length overpowered their enemy, the "Stars and Stripes" was hauled down, and on every vessel the English flag was hoisted in its place.

A Rough Journey.

On the waterway of the lakes there was now no longer any resistance, and again the light vessels, to which the troops had been transferred, essayed to pass over it. But the depth beneath the keels became less and less, and even the lightest craft one after another stuck fast. The boats were of necessity hoisted out, and the soldiers, packed tightly in them, cramped in one position, began a miserable transit of thirty wiles to Pine Island—a barren spot where all were to be concentrated before further operations were attempted.

No boat, heavily laden as all were, could cover the long distance in less than ten hours, and, besides the discomfort to the men, inseparable from such long confinement, matters were made infinitely worse by a change in the weather. A heavy rain began, to which a cloak formed no protection, and such as is only seen in semi-tropical countries.

The operation began on the 16th, and, with all the diligence and continued exertion of which officers and men, soldiers and sailors, were capable, it was not finished until the 21st. By day and night for these days boats were being pulled from the fleet to the island and from the island to the fleet. The strain upon the sailors was terrific, and many of them were almost without ces-

sation at the oar. Not only had they to support hunger, fatigue and sleepless nights, but the constant changes of temperature aggravated the hardships. Drenching rain by day alternated with severe frosts by night, and tried to the uttermost the endurance of all. Nor was the army, as it landed in successive detachments on Pine Island, in a better plight. Bivouacked on a barren, swampy spot, which did not even produce fuel for camp fires, the clothes which had been saturated with rain by day and congealed into hard and deadly chilling husks by night, with no supply of food but salt meat, biscuit, and a little rum provided from the fleet, soldiers have seldom been exposed to more severe trials of their fortitude.

British Fortitude.

But, in spite of all, no complaints or murmurings rose from the expedition. The miseries of the present were forgotten in the high hopes of the immediate future, and this confidence did not arise alone from trust in their own strength, but deserters from the enemy related the alarm that existed in New Orleans, assured the invaders that not more than 5,000 men were in arms against them, that many of the city's inhabitants were ready to join them when they appeared, and that conquest, speedy and bloodless, was within their grasp.

Meanwhile, in New Orlean; itself, General Jackson had been meeting difficulties, working to restore configuration, and providing for the necessities of the military situation with all the energy of his nature. The news of the disaster to the American gunboats had filled the people with alarm. Rumors

of treason began to spread, an insurrection of the slaves was dreaded, the armed ships in the river were still unmanned, and the expected reinforcements had not arrived. A desperate situation demanded the strongest and most unusual measures. Jackson did not hesitate to adopt them, and assumed the great responsibility of proclaiming martial law, so that he could wield the whole resources of the town, and direct them unimpaired by faction against his foe

Expresses were sent to the approaching additions to his strength, urging them to increase their efforts to push forward. The two war vessels-the Carolina and Louisiana—whose possible importance as factors in the approaching struggle was recognized, were manned and prepared for service; and even a lawless semi-piratical band of smugglers was forgiven its crime, taken into the service of the Republic, and organized into two companies of artillerymen. So great, however, was the lack of war munitions that even the flints of these privateers' pistols were received from them as a precious prize, and were forthwith fitted to muskets.

Completing Preparations.

The whole of the English field army was assembled on Pine Island on the 21st of December, but having been so long on board ship, and its various corps having been gathered from many different points, it became necessary, before further advance was made, to form it in brigades, to allot to each brigade a proportion of departmental staff—such as commissaries, medical attendants, etc.—and to establish depots of provisions and military stores.

In completing these arrangements the whole of the 22d was passed, and it was not till the morning of the 23d that General Keane's advanced guard could start for its descent on the mainland. This advanced guard was made up of the 4th, the 85th Light Infantry, and the six companies of the 95th Rifles. To it were attached a party of rocket-men and two light three-pounder field-pieces. The whole was under the command of Colonel Thornton, 85th.

Short of Transports.

The main body of the force was divided into two brigades—the first composed of the 21st, 44th, and one West India regiment, with a proportion of artillery and rockets, under Colonel Brook; and the second, containing the 93d and the other West India regiment, under Colonel Hamilton, also provided with rockets and field-guns. The dismounted dragoons remained as a personal bodyguard to the general until they could be provided with horses.

It was intended that the descent of the army on the mainland should take place on the bank of the Bayou Bienvenu—a long creek which ran up from Lake Pontchartrain to within a short distance of New Orleans through an extensive morass. Every boat that could be sent from the fleet was to be used for the service, but not more could be provided than were sufficient to transport a third of the army at one time.

The undertaking was therefore most hazardous, as, if the troops were placed in proximity to the enemy in successive divisions at long intervals of time, each might be cut to pieces in detail. Neither leaders nor rank and file were, however, men to be deterred even by excessive

risks, and, as has been said, they had the assurance of deserters that great resistance was not to be anticipated. Colonel Thornton's advanced guard was therefore embarked. Many miles had to be traversed, and again the soldiers were exposed to long hours of confinement in a cramped position; again the heavy rain of the day was succeeded at sundown by a bitter frost.

Nor could they proceed after dark had set in, and, during the long weary hours of night, the boats lay in silence off their landing-place. By nine o'clock on the following morning, however, the landing was effected, and with limbs stiffened and almost powerless, with little available food to restore exhausted strength, 1,600 men stood at last upon the enemy's shore.

In a Wilderness.

Wild and savage was the scene where the little band found itself. A scarcely distinguishable track followed the bank of the bayou. On either side was one luge marsh, covered with tall reeds. No house or vestige of human life was to be seen, and but few trees broke the monotony of the dreary waste. Forbidding as was the spot, and ill-adapted for defence in case of attack, it might have possibly been supposed that General Keane, who accompanied the advanced guard, would liave here remained in concealment till the boats. which had returned to Pine Island, had brought the remainder of his force; but he judged it best to push on into more open country, influenced by the hope of striking a swift and unexpected blow, and by his fairly well-founded doubts whether even now his enemy's

scouts might not now be hovering round him.

The advance was formed, and, after several hours' march, delayed by the difficulties of the marshy road, by the numerous streams and ditches that had to be crossed, and by the fetid miasma that filled the air, the track began to issue from the morass, there were wider and wider spots of firm ground, and some groves of orange trees presented themselves.

The Advance Discovered.

It was evident that human habitations must be near, and increased caution and regularity became necessary. At last two or three farm houses appeared. The advanced companies rushed forward at the double and surrounded them, securing the inmates as prisoners, There was a moment of carelessness. however, and one man contrived to effect his escape. Now all further hope of secrecy had to be abandoned. General Keane knew that the rumor of his landing would spread with lightning speed, and all that was left to him was to act with determination, and make the appearance of his force as formidable as possible.

The order of march was re-formed so that, moving upon a wide front, the three battalions had the semblance of twice their real strength, and the pace was quickened in order to gain a good military position before an enemy's force could show itself. Onward they pressed, till they found themselves close to the bank of the mighty Mississippi and wheeling to the right, they were on the main road leading to New Orleans.

They faced towards the city on a narrow plain, about a mile in width.

with the river on their left, and the marsh which they had quitted on their right. A spot of comparative safety had been reached, the little column halted, piled arms, and its bivouac was formed. It was late in the afternoon before the moment of repose came, but the soldiers prepared to make the most of it; outposts were placed to secure them from surprise, foraging parties collected food, and fires were lighted.

The evening passed with one slight alarm, caused by a few horsemen who hovered near the pickets, and darkness began to set in. In the twilight a vessel was seen dropping down the current, and roused curiosity among those who had not stretched themselves by the fires to seek much-needed sleep. was thought that she might be an English ship, which had managed to pass the forts at the mouth of the river. She showed no colors, but leasurely and silently she dropped her anchor abreast of the camp and furled her sails. To satisfy doubt she was repeatedly hailed, but no answer was returned. A feeling of uneasiness began to spread, and several musket shots were fired at her, but still reply came not from her dimly-seen bulk.

Roar of Guns.

Suddenly she swung her broadside toward the bank, and a commanding voice was heard to cry, "Give them this for the honor of America." The words were instantly followed by the flash and roar of guns, and a deadly shower of grape swept through the English bivouac. The light artillery which had accompanied General Keane's advance guard was helpless against so powerful an adversary, and

nothing could be done but to withdraw the exposed force behind the shelter of the high levee. The fires were left burning, and, in the pitch-dark night, those who were uninjured were forced to cower low while the continued storm of grape whistled over their heads, and they could hear the shrieks and groans of their wretched comrades who had been wounded by the first discharge.

Blaze of Musketry.

Thus they lay for more than an hour, when a spatting fire of musketry was heard from the pickets which had been able to hold their position. Whether this fire was only the sign of slight skirmishing at the outposts, or whether it foreboded a serious attack, was for some minutes doubtful, but a fierce yell of exultation was heard, the blackness of night was lighted by a blaze of musketry fire breaking out in semi-circle in front of the position, and the certainty came that the enemy were upon the advance guard in overpowering numbers.

The situation seemed almost desperate. Retreat was impossible, and the only alternatives were to surrender or to beat back the assailants. General Keane and his followers were not the men to surrender, and at once assumed the bolder course. The 85th and 95th moved rapidly to support the pickets, while the 4th were formed as a reserve in the rear of the encampment. In the struggle that followed there was no opening for tactics, none for the supervision and direction of a general, or even of the colonels of battalions.

The darkness was so intense that all order, all discipline were lost. Each man hurled himself direct at the flashes

of musketry; if twenty or thirty united for a moment under an officer, it was only to plunge into the enemy's ranks and to engage in a hand-to-hand conflict, bayonet against bayonet, sword against sword. In the dire confusion of the bloody *melee* it soon became impossible to distinguish friend from foe.

Americans Give Way.

The British field-artillery dared not fire for fear of sweeping away Americans and Englishmen by the same discharge. Prisoners were taken on both sides, and often released at once by the sudden rush of assistance. As both armies spoke the same tongue a challenge was of no avail, and till the deadly thrust or shot came no man could be certain who stood in front of him.

In the nature of things such fighting could not be of long continuance. The Americans, astonished by the vigor of the assault, gave way, and were followed up for some distance; but the English officers strove to rally their men, and to make them fall back to their first position; and soon all but those who had fallen were re-formed and concentrated. The Americans had been repulsed on all sides, but the fight had cost the English dearly, as, including the loss from the fire of the ship, 46 were killed and 167 wounded, besides 64 taken prisoners.

The miserable night wore on, but with the morning's dawn there came a renewal of the inglorious peril. The schooner whose fire had been so disastrous on the preceding evening still lay off in the river, and had now been joined by another vessel. They were the Carolina and Louisiana. Safe from

any retaliation, their guns covered the shore and effectually precluded any movement of the English, who were obliged—hungry, cold and wearied—to seek shelter under the levee from the shower of projectiles which swept the plain.

But meanwhile the rest of the army was landing, and hastening to join their comrades. The roar of the cannon had been heard far over the waters of Lake Pontchartrain, and had added energy to the strong arms that were pulling the boats. By nightfall on the 23rd the two brigades had both arrived on the scene of battle, and had taken up their ground between the morass and the river, but throwing back their left, so as to avoid the fire of the ships.

The Brave Defenders.

The advanced guard could at last be extricated from the trap into which it had fallen, and the night of the 24th was passed in quiet and in disheartened speculation whether the advance could be resumed or not. The responsibility of decision was, however, removed from General Keane by the unexpected arrival on the morning of the 25th of Sir Edward Pakenham and General Gibbs, who had been sent from England as first and second in command.

Let us see what had been the course of affairs in New Orleans while the events just related were occurring. At the time that the English army was concentrating at Pine Island the defence of the city still depended alone on the small, half-organized force which General Jackson had found under his hand on his first arrival. But on the 21st the long-expected reinforcements began to pour in. General Coffee—the

numbers of his following terribly reduced by the toils of an unprecedentedly rapid march—came at the head of mounted Tennessee sharpshooters, hunters and pioneers from their youth. Colonel Hinds brought the Mississippi Dragoons. On the 22d General Carroll's flotilla arrived with a further body of Tennesseeans, and, what was almost more important, a supply of muskets.

Costly Delay.

The different corps were not yet, however, actually united in one body, and when the sudden report came that General Keane had actually landed, there was no military cohesion among them. If the English advanced guard had pushed at once on the city, instead of bivouacking during the afternoon of the 23d, they might possibly have encountered no combined resistance, and have overthrown the Americans in detachments. But Keane's halt, however much it may possibly be justified, gave Tackson the opportunity he required, and enabled him to put all his men in line. The Carolina and Louisiana were sent down the river, with what result we have seen. The land troops were hurried to meet the enemy in the field, and the bitter struggle on the night of the 23d took place.

When Sir Edward Pakenham took over the command of the English army he found himself in as unsatisfactory a position as could well fall to the lot of any general. He found himself committed to a course of action which he had not initiated, and of which possibly he did not approve. He found his force in a cramped position, which offered no scope for the operations of highly trained

and disciplined soldiers, and he learned that its advanced guard had suffered, if not a defeat, at least a very serious check. If the end of the campaign was failure, he certainly should not be laden with all the blame. Carefully he reconnoited the situation, and carefully he considered the state of affairs.

It was evident that no advance could be made as long as the Carolina and Louisiana were able to pour forth their murderous fire, and the night of the 25th was employed in erecting on the levee batteries armed with heavy shipguns sent from the fleet. When these opened with red-hot shot on the morning of the 26th, the doom of the Carolina was sealed, her crew escaped in their boats, and she blew up. The Louisiana effected her escape while her consort was the sole object of the English artillery. Now that the river was thus cleared, and the left flank of his force was no longer exposed to destruction if it moved forward on the road to New Orleans, Pakenham made his dispositions for decisive advance.

Plan of Battle.

He reorganized his army, dividing it into two columns. That on the right—consisting of the 4th, 21st, 44th, and one West India Regiment—he placed under command of General Gibbs; the other—comprising the 95th, 85th, 93d, and the other West India regiment, with all the available field-artillery, now increased to ten guns—remained under General Keane, and was to take the left of the line, while the dragoons, few of whom were yet mounted, furnished the guards to hospitals and stores.

But there was still much to do. Heavy guns, stores, and ammunition had to be

brought from the distant fleet, the wounded had to be disposed of, and the numberless requirements of provision and protection for an army in the field had to be attended to. For two days the English lay perforce inactive, though their outposts were exposed to constant harassing and deadly attack from the American sharpshooters and partisans.

In European war, by tacit convention, pickets and sentries confined themselves to the duties of watchfulness alone; but the riflemen of America saw in every enemy's soldier a man to be killed at any time, and they stalked individuals as they would have stalked deer in their own backwoods, slaying and wounding many, and causing anxiety by the never-ceasing straggling fire.

Begins to March.

At length all was ready for the long-delayed advance, and on the bright, frosty morning of the 28th the army began its march. Confidence in a new commander of high reputation had restored spirits to the men; cold, wet, hunger, and broken rest were forgotten, and as the enemy's advanced corps fell back before them, hopes of conquest were renewed. Four or five miles were traversed without opposition. On the dead flat of the plain nothing could be seen far in advance of the columns, and they had no cavalry to scout in front and say what lay in their path.

Suddenly, where a few houses stood at a turning in the road, the leading files came in view of the foe's position. In their front was a canal, extending from the morass on their left towards the river on their right. Formidable breastworks had been thrown up, powerful batteries erected, while the Louisiana and some gunboats moored in the Mississippi flanked their right. Sudden and tremendous was the cannonade, withering the musketry fire that burst upon the English column and mowed down their ranks. Red-hot shot set fire to the houses which were near to them.

Infantry Hurled Back.

Scorched by flame, stifled with smoke, shattered by the close discharge, the infantry were, for the time, powerless, and had to be withdrawn to either side of the line of attack, and the artillery were hurried forward to reply to the American guns. To no purpose. The contest was too unequal. The heavy guns in the batteries and the broadsides of the Louisiana destroyed the light English field-pieces almost before they could come into action. The infantry again pressed forward, only to find themselves hopelessly checked by the Staggered, shaken, and disordered, the English columns reeled under the blows which they had received.

A halt was ordered, and then, slowly, sullenly, with sorrow, the whole force fell back. Again Sir Edward Pakenham found himself obliged to bivouac by the river side instead of occupying New Orleans, again he had to consider how the determined American resistance was to be overcome. The English bivouac was formed two miles from the American lines. A sorry place of rest it was.

Once more the outposts were exposed to the stealthy attacks of an ever-vigilant, cunning, and active foe. Even the main body was hardly secure,

for, by giving their guns a great elevation, the Americans were occasionally able to pitch their shot among the camp fires.

Jackson Fortifying.

The possibility of turning the enemy's left by penetrating the morass which protected it was contemplated, but the idea had to be abandoned as soon as conceived. In the meanwhile General Jackson was vigorously at work in strengthening his already strong position. Numerous parties could be seen laboring upon his lines, and daily reinforcements came in to swell the numbers of their defenders. By the suggestion of Commodore Patterson, a strong field-work was constructed on the opposite bank of the river, and armed with heavy ship-guns, from which a flanking fire could be poured on all the space over which the English must attack.

In view of the many difficulties which presented themselves, General Pakenham called a council of war, which was attended by all the English naval and military leaders. It was impossible to carry the American lines by assault, for their powerful artillery would deal certain destruction to infantry columns. To turn them was impossible, and their defenders could not be induced by any manœuvring to leave their protection. The council decided on the only other possible alternative—to treat them as a regular fortification, and, by breaching batteries, to try to silence some of their guns, and to make in them a practicable gap, through which an entrance might be effected.

To give effect to this resolution the 29th, 30th, and 31st December were

employed in bringing up heavy cannon, accumulating a supply of ammunition, and making preparations as for a regular siege. When these arrangements were complete—arrangements which demanded the most strenuous and unremitting toil from everyone, from the general in command to the humblest private soldier—hesitation had no place and delay was at an end. Under cover of night, on the 31st, half of the army stole silently to the front, passing the pickets, and halted within 300 yards of the American lines.

Here a chain of works was rapidly marked out, the greater part of the detachment piled their firelocks, and addressed themselves vigorously to work with pick and shovel, while the remainder stood by armed and ready for their defence. So silently and to such good purpose was the work performed, that before the day dawned six batteries were completed, in which were mounted thirty pieces of heavy ordnance.

Shrouded in Gloom.

The morning of the 1st January, 1815, broke dark and gloomy. A thick mist obscured the sun, and, even at a short distance, no objects could be seen distinctly. The English gunners stood anxiously by their pieces, and the whole of the infantry were formed hard by, ready to rush into the breach which they hoped to see made. Slowly, very slowly, the mist at length rolled away, and the American camp was fully exposed to view.

As yet unconscious of the near presence of the thirty muzzles which were ready to belch forth their contents, the Americans were seen on parade. Bands were playing, colors flying, and there

was no preparation for immediate deadly struggle. Suddenly the English batteries opened, and the scene was changed. There was a moment of dire confusion, a dissolution of the ordered masses which stood ready for review by their general. The batteries were unmanned, the pieces silent. But, though the English salvo was unexpected, there was no real unreadiness to resist and to reply to its stern challenge.

Storm of Shot and Shell.

The American corps fell quickly into their positions in the line of defence, their artillery, after brief delay, opened with rapidity and precision, the furious cannonade on both sides rent the air with its thunder, and battery answered battery with storm of shot and shell. Heavy as was the attackers' fire, however, it produced comparatively little effect on the solid earthworks of the defence, while the numerous guns which Jackson had mounted, aided by the flanking fire from the works on the opposite bank of the river, were crushing in their power.

Hour after hour the duel continued, and yet no advantage was gained which would warrant Pakenham in hurling his infantry at the fortifications that stood in their front. The English ammunition began to fail and their fire slackened, while that of the Americans redoubled in vigor; and towards evening it became evident that another check had been suffered, and that again the invading army must fall back.

Dire was the mortification in the English ranks, bitter the murmurs that spread from man to man. The army had endured hardships with cheerfulness, they had undertaken severest toil

with alacrity, but they had thought that victory was their due, and still they encountered repeated defeat. Now their encampment was open to the enemy's unremitting fire, and advance or retreat seemed equally impossible.

But Pakenham had some, at least, of the best qualities of a leader. He refused to lose heart, and adopted a plan which well merited success by its boldness, and whose ultimate failure was in no way to be credited to any laxity on his part. He had recognized that the enemy's flanking battery on the right bank of the Mississippi was his greatest obstacle, and he conceived the idea of sending a strong force across the river, which should carry this battery by assault and turn its guns against the Americans themselves, while a simultaneous attack should be delivered directly upon the intrenchments.

All at Work.

To do this, however, a sufficient number of boats must be provided, and it was necessary to cut a canal from the Bayou Bienvenu wide and deep enough to float the ships' launches now in the lake. Upon this arduous undertaking the whole of the force was at once set to work. Day and night the labor was carried on; relay after relay of soldiers took up the task, and by January 6th it was accomplished. No better means could have been taken to restore the spirits of the men than the imposing of work, however hard, which seemed to promise a definitely favorable influence on their fortunes.

Discouragement and forebodings were still further dissipated by the unexpected arrival of Major-General Lambert with the 7th and 43rd, two fine battalions, each mustering 800 effective men. Further reinforcements of marines and seamen also joined, bringing the English fighting strength up to nearly and frustrating the passage of the heavi-



ANDREW JACKSON.

12,000. At the same date, General Jackson had probably about 5,000 under his command.

It has been said that the canal from the bayou to the river was finished on the 6th, and no time was lost in carrying out the plan of which it was so great a factor. Boats were ordered up for the conveyance of 1,400 men, and Colonel Thornton, with the 85th, the marines, and a party of sailors, was appointed to cross the river. But illfortune still dogged the English general, still it seemed fated that his bestlaid plans should be frustrated by accident. The soil through which the canal was dug being soft, part of the bank gave way, choking the channel

> est boats. These, in turn, impeded others, and, instead of a numerous floa tilla, only sufficient for about 350 men reached their destination, and even these did not arrive at the time appointed.

> It was intended that Colonel Thomaton's force should cross the Mississippi immediately after dark on the evening of the 7th. They were to carry the enemy's battery and point the guns on Jackson's lines before daybreak on the 8th. The discharge of a rocket was to give them the signal to commence firing, and also was to let loose the rest of the army in a direct attack.

The disposition for this

attack was as follows: -General Keaner with the 95th, the light companies of the 21st, 4th, and 44th, and the two West India regiments, was to make a demonstration on the enemy's right; General Gibbs, with the 4th, 21st, 44th, and 93rd should force their left; whilst General Lambert, with the 7th and 43rd, remained in reserve. Scaling-ladders and fascines were provided to fill the ditch and mount the wall; and the honorable duty of carrying them to the point of attack was allotted to the 44th, as being the regiment most experienced in American war. It was hoped that the fate of

New Orleans would be sealed on the 8th January.

While the rest of the army laid down to sleep on the night of the 7th, Colonel Thornton, with 1,400 men, moved to the river's brink. But the boats had not arrived. Hour after hour passed before any came, and then so few were they that only the 85th, with about 50 seamen—in all 340 men—could be embarked. The duty admitted of no hesitation or delay, and Colonel Thornton, with his force thus sadly weakened, pushed off.

Fatal Errors.

The loss of time was irreparable. It was nearly dawn ere they quitted the canal, and they should have been on the opposite bank six hours earlier. In vain they made good their landing without opposition; day had broken, the signal rocket was seen in the air, and they were still four miles from the battery which ought long before to have been in their hands.

Before daylight the main body was formed in advance of the pickets, ready for the concerted attack. Eagerly they listened for the expected sound of firing, which should show that Thornton was doing his work; but they listened in vain. Nor did Pakenham's plan fail him in this respect alone. The army, in its stern array, was ready for the assault, but not a ladder or a fascine was in the field. The 44th, who had been appointed to bring them, had misunderstood or disobeyed their orders, and were now at the head of the column without the means of crossing the enemy's ditch or mounting his parapet.

Naturally incensed beyond measure, the general galloped to Colonel Mullens, who led the 44th, and bade him return with his regiment for the ladders; but the opportunity for using them was lost, and when they were at last brought up they were scattered useless over the field by the demoralized bearers.

A Withering Fire.

The order to advance had been given, and, leaving the 44th behind them, the other regiments rushed to the assault. On the left a portion of the 21st, under the gallant Rennie, carried a battery, but, unsupported and attacked in turn by overpowering numbers of the enemy, they were driven back with terrible loss. The rest of the 21st, with the 4th, supported by the 93rd, pushed with desperate bravery into the ditch, and, in default of the ladders, strove to scale the rampart by mounting on each other's shoulders—and some, indeed, actually effected an entrance into the enemy's works.

But, all too few for the task, they were quickly overpowered and slain, or taken prisoners. The withering fire that swept the glacis mowed down the attacking columns by companies. Vainly was the most desperate courage displayed. Unseen themselves, the defenders of the entrenchments fired at a distance of a few yards into the throng that stood helplessly exposed, while the guns on the other side of the river—yet unmenaced—kept up a deadly cannonade. Neverhave English soldiers died to so little profit, never has so heavy a loss been so little avenged.

Sir Edward Pakenham saw his troops in confusion, and the wavering in effort which ever preludes hopeless flight. All that a gallant leader could do was done by him. The 44th had come up, but in so great disorder that little could be hoped from such a battalion. Riding to their head, he called for Colonel Mullens to lead them forward, but he was not to be found at his post. Placing himself at their head, the general prepared to lead them in person; but his horse was struck by a musket-ball, which also gave him a slight wound. He mounted another horse, and again essayed to lead the 44th, when again he was hit. Death took him before he had tasted the full bitterness of defeat, and he fell into the arms of his aide-decamp.

Brave Officers.

Colonel Mullens was subsequently tried by court-martial and cashiered. General Gibbs and General Keane did not fail to do their duty as English soldiers. Riding through the ranks, they strove to restore order and to encourage the failing energy of the attack, till both were wounded and were borne from the field. Their leaders gone, and ignorant of what should be done, small wonder if the troops first halted, then began slowly to retire, and then betook themselves to disordered flight. Great as was the disaster, its results might have been even more crushing than they were but that the 7th and 43d. presenting an unbroken, steadfast front, prevented any attempt on the part of the Americans to quit the shelter of their lines in pursuit.

We left Colonel Thornton and his 340 men on the right bank of the Mississippi, and four miles from the battery which they had been detailed to take, and whose power was so severely felt by the main body of the English army. They had seen the signal-rocket which told that their comrades were about to attack, and late though they were, they pressed forward to do their share of the day's operations. A strong American outpost was encountered, but it could not withstand the rush of the 85th, and fled in confusion. The position where the battery was mounted was reached, and to less daring men than Colonel Thornton and his little following might have seemed impregnable.

Desperate Assault.

Like their countrymen on the other side, the Americans, 1,500 in number, were strongly entrenched, a ditch and thick parapet covering their front. Two field-pieces commanded the road, and flanking fire swept the ground over which any attack must be made. The assailants had no artillery, and no fascines or ladders by means of which to pass the entrenchment. But, unappalled by superior numbers, undeterred by threatening obstacles, the English formed for immediate assault. 85th extended across the whole line; the seamen, armed with cutlasses as for boarding, prepared to storm the battery, and the few marines remained in reserve.

The bugle sounded the advance. The sailors gave the wild cheer that has so often told the spirit and determination of the British service, and rushed forward. They were met and momentarily checked by a shower of grape and canister, but again they pressed on. The 85th dashed forward to their aid in the face of a heavy fire of musketry, and threatened the parapet at all points. From both sides came an unremitting discharge; but the English, eager to be at close quarters, began to mount the

parapet. The Americans, seized with sudden panic, turned and fled in hopeless rout, and the entrenchment, with eighteen pieces of cannon, was taken. Too late! These very guns had been able already to take their part in dealing destruction to Sir Edward Pakenham's morning attack, and if they were now taken—if their defenders were dispersed—they had done all that they were wanted to do.

Even yet, if the disaster to the British main body had not been so complete and demoralizing, they might have been turned upon Jackson's lines and covered a second assault; but this was not to be. General Lambert, on whom had fallen the command of all that remained of the army, resolved—perhaps, under the circumstances, with wisdom—to make no further attempts on New Orleans. To withdraw his gun.

army was, in any case, difficult; another defeat would have rendered it impossible; and, as the Americans had gained confidence in proportion as the English had lost it, defeat was only too probable.

In the last fatal action nearly 1,500 officers and men had fallen, including two generals, for General Gibbs had only survived his wound for a few hours. The English dead lay in piles upon the plain. Of the Americans who had so gallantly defended their country, eight only were killed and fourteen wounded.

Alas! that electricity did not then exist to prevent so great a sacrifice of honor and life; for the preliminaries of peace between England and the United States had been signed in Europe before the campaign of New Orleans was begun.

CHAPTER XXIV.

Great Battle of Gettysburg.

UR object in this part of the present volume is to depict only those famous battles in the Nineteenth Century which had a determining effect upon the fate of nations, those decisive contests that have either fully settled the important questions in dispute, or have had a powerful influence in doing this. There have been bloody struggles between great armies on the battle field that may be called crises in the history of nations. They have been turning points in human affairs. Such a battle was that of Gettysburg, a three days' fight that turned the tide of fortune in the great American Civil War.

Why in the outset the celebrated Confederate commander, Lee, undertook the unpromising invasion of Pennsylvania after the disastrous failure in Maryland the fall before, and why once north of the Potomac he did not, instead of looking backwards, cut loose entirely from his base and rush for Philadelphia and the heart of the North, are two moot questions of absorbing interest to the veterans of the Civil War.

After the halt of Longstreet and Hill in the vicinity of Chambersburg the reason why the invasion was pushed no further and Ewell was drawn back from the Susquehanna is found in the vigorous operations of the Union army. Meade's unexpected appearance at Gettevsburg admonished Lee that it was 'oo late to cross the Susquehanna. He

was compelled to concentrate, and his defeat brought the invasion and all hope of further advance to an end.

Lee's successes at Fredericksburg and Chancellorsville had given him unlimited confidence in his troops and the natural inclination to belittle his enemy. Grant's grip upon Vicksburg compelled the reinforcement of the Confederates in the West, or such movements elsewhere as would compel Grant to detach troops, and thus loosen his hold upon the Mississippi stronghold. Lee objected at that time to dividing his army by detaching any part of it to the West. He preferred to do something on his own front to relieve the Confederate situation.

Therefore, during May and June, 1863, his army was strengthened in every possible manner, and the crossing of the Potomac determined upon in order to transfer the war upon Northern soil. These were the primary causes of the invasion of Pennsylvania, and of the great disaster which overtook the Confederate army at Getteysburg.

A movement to the Potomac in force was always an easy one for the Confederate commanders. Covered by the Rappahannock and the Blue Ridge Mountains, Lee had no difficulty in making the march, and on the route surprising, capturing and scattering the Union forces in the valley under General Milroy, an officer of courage and patriotism, but of very unsound judg-

ment and little military capacity. Until Lee knew what effect his tentative movements were having on the Union army at Fredericksburg, under Hooker, his march was hesitating and uncertain. Hooker had quickly detected the Confederate withdrawal and foreshadowed what actually followed, an invasion.

Across the Potomac.

He asked President Lincoln for permission to cross the Rappahannock and make a dash for Richmond, which it is now clear from the official reports of Lee would instantly have called him back to the defense of his capital. Mr. Lincoln, however, doubted the expediency of Hooker's bold project. probable after the Chancellorsville disaster he had misgivings as to Hooker's nerve and capacity. He, therefore, prevented the proposed counter move on Richmond, and henceforward Hooker contented himself with simply moving on interior lines to cover Washington. The moment Lee perceived that Hooker had withdrawn from the line of the Rappaliannock his hesitation disappeared. Longstreet and Hill immediately followed Ewell in to the Shenandoalı Valley.

On June 15th the Confederate General Ewell crossed the Potomac at Williamsport. Jenkins, with his cavalry, was pushed forward to Chambersburg; Rodes's division occupied Hagerstown, Md., and that of Edward Johnson, Sharpsburg, while 'Early's division threatened Harper's Ferry from the vicinity of Shepherdstown.

On the 21st, while occupying these positions Ewell received orders fr in Lee to "take Harrisburg." At this time the Confederate army was strung

out from Fredericsburg to Chambersburg, a most extraordinary and dangerous disposition in the immediate presence of the enemy. After Hooker's withdrawal from Fredericsburg the long Confederate line was now rapidly shortened by the concentration of Longstreet and Hill at Chambersburg.

On the 24th Hill's corps crossed the Potomac at Shepherdstown and vicinity, while Longstreet was crossing at Williamsport. These two corps went into bivouac at Chambersburg on the 27th, where they remained quietly until the 29th of June, their foraging parties meanwhile collecting supplies and raiding the country in every direction.

A Ravenous Horde.

Their ravages were fearful. honest farmers and burghers of Maryland and the lower counties of the old Keystone State must have been aghast at the hungry hordes swarming up from the South. General Lee, with cool irony, reported that he gave orders that all supplies taken must be carefully paid for, which was done in Confederate notes, then being worth but little in the South itself, and nothing whatever in Pennsylvania. A Union scout at Hagerstown reported that the Confederates carried their money in flour barrels. The reckless abandonment of these soldiers to liberality is illustrated in the astonishment of one rich old farmer, who was forced to take a five dollar Confederate note instead of fifty cents in Union money for two old horse-shoes.

Ewell had rapidly marched on Carlisle with Rodes's and Johnson's divisions, sending Early to York. Carlisle, only fifteen miles from Harrisburg,

was occupied on the 27th and York on the 28th. This movement had again somewhat scattered the Confederates, but Lee at Chambersburg with two-thirds of his army was about ready to move forward in support of Ewell's advance against Harrisburg when something happened. General Hooker had followed Lee across the Potomac; his movements up to June 28th had been well conceived and admirably carried out.

His eventual purpose had been to throw himself across Lee's line of communications with the Potomac and force the Confederates to a decisive engagement on his own terms. But a disagreement arose between the General-in-Chief, Halleck, at Washington, and General Hooker, in regard to the disposition of the Union troops at Harper's Ferry, and Hooker had thereupon asked to be relieved of the command of the Army of the Potomac. Halleck had no confidence in Hooker, and the latter's request was instantly granted.

Two Gallant Commanders.

At that time there was only two officers in that army whose character and achievements had raised them to the plane of so high and important a command. They were Major General John F. Reynolds, commanding the First Corps, and Major General George G. Meade, commanding the Fifth Corps. It is a curious fact that they were both Pennsylvanians, and both were also West Pointers. Reynolds ranked Meade, and it is known that it was the original intention of the military authorities to confer the chief command on him when Hooker should go. But Reynolds had been sounded, and had declined the command unless allowed certain freedom of action, which it was deemed inadmissable to grant. Therefore the command was conferred upon General Meade, who in turn gave the Fifth Corps to General Sykes.

A Masterly Man.

This change occurred near Frederick, Md., on the morning of June 28, only three days before the armies met in mortal combat at Gettysburg. Meade was an able officer, who had grown up with the Army of the Potomac, and had the confidence of all the superior generals. He was, perhaps, not a dashing fighter, like Hooker or Reynolds, but he was, nevertheless, a man of courage and judgment, and knew how to marshal troops on the field of battle as well as any officer living. The three chief figures in the Army of the Potomac, Meade, Reynolds and Hancock, were all Pennsylvanians, and all to perform leading parts in the drama upon Pennsylvania soil.

The new Federal commander, after taking his bearings, abandoned Hooker's plan of merely following Lee and placing the Union army square across his communications. Meade's directions from Halleck were to cover Washington and Baltimore. General Meade pushed all his corps directly northwards on the inner line, with the object of attacking any of Lee's forces that came in his way, under the belief that this would compel the Confederates to immediately drop his movement across the Susquehanna and turn and fight. That was precisely the immediate effect of Meade's movement.

This forward movement of the Union army, then, was what had happened to

change Lee's plans. Instead of ordering Longstreet and Hill forward to the rich fields of the Susquehanna, in support of Ewell, and, perhaps, to the sacking of Harrisburg and Philadel-

phia, the concentration of the great rebel fighting machine was to be effected by drawing Ewell's scattered divisions back to Gettysburg. It is worth noting here that upon learning of the rapid concentration of the Union army on his immediate flank Lee's original idea was to concentrate about Chambersburg. There are many well-informed people who still cling to the exploded notion that the battle of Gettysburg was an accident. It was not so.

After considering the situation for a few hours after the necessity for withdrawal of Ewell was admitted, General Lee perceived the importance of Gettysburg as a great strategic position by

reason of the many excellent turnpike roads which radiate therefrom. At Gettysburg he would not only occupy a commanding position from which to deliver battle, but one available from which to fall back toward the Potomac and one threatening both Washington and Baltimore. These considerations impelled Lee to change his previous order to Ewell to come back to Chambersburg, in the following terms:

"Headquarters Army of Northern Virginia, Chambersburg, June 28, 1863,
—Lieutenant General R. S. Ewell.

Commanding Corps—General: I wrote you last night stating that General Hooker was reported to have crossed the Potomac, and is advancing by the way of Middletown, the head of his



GENERAL GEORGE G. MEADE.

column being at that point, in Frederick county. I directed you in that letter to move your forces to this point. If you have not already progressed on the road, and if you have no good reason against it, I desire you to move in the direction of Gettysburg, via Heidlersburg, where you will have a turnpike most of the way, and you can thus join your other divisions to Early's, which is east of the mountains. I think it preferable to keep on the east side of the mountains.

"R. E. LEE, General."

The history of the event is proof that in thus changing the point of concentration from Chambersburg, which was behind the screen of a mountain range, to Gettysburg, in the close presence of his enemy, General Lee made a serious mistake. We can now see that he was playing into General Meade's hands. It is obvious, however, from his Pipe Creek plan of defensive battle, that General Meade expected that Lee would be compelled to do this very thing. Had Lee remained at Chambersburg Meade would have been compelled to cross the mountain to beat him up, and thus might have become the aggressor against some strong position and been defeated.

General Meade's Plan.

On the 28th and 29th the northward movement of the Union army had been rapid; General Reynolds had been put in command of the left wing, on the danger flank of the advance. It was composed of the First, Third and Eleventh Corps. On the 29th these three corps, commanded by a fighting General, who saw his native State for the first time under the iron heel of the invader, were within ten miles of Gettysburg. On the 30th Reynolds, with the First Corps, had advanced to Marsh creek, within four miles of Gettysburg, while the Third and Eleventh Corps remained at Emmittsburg.

It was during this day that General Meade's policy of fighting behind the Pipe creek line a defensive battle becomes manifest in the movement of the troops. While Reynolds was far out toward the front and left, feeling for the enemy, with orders to fall back behind Pipe creek if practicable or advis-

able, in case of collision, the other corps of the army were back from ten to twenty-five miles from Gettysburg. On the afternoon of the 30th Buford's division of cavalry had occupied Gettysburg, and remained there.

How the Battle Began.

Let us now turn to the Confederate columns that we may understand how the explosion occurred at Gettysburg, and not along Pipe creek, as Meade tentatively hoped it would. Rodes, of Ewell's corps, was moving on Gettysburg from Carlisle, at the north, by way of Heidlersburg; Early was moving on Gettysburg from York, at the east, by way of Heidlersburg; Hill's corps, followed by Longstreet's two divisions of Hood and McLaws, was moving on Gettysburg from Chambersburg, at the west, joined by Johnson's division, of Ewell's somewhere in the vicinity of Cashtown, in the movement of the 1st of July. Most of Hill's corps was bivouacked at and about Cashtown on the night of the 30th, ready to resume the march in the morning. Early and Rodes were not far from Heidlersburg.

Fifty thousand Confederates were within eight miles of Gettysburg on the morning of July 1st, which was occupied by Buford's small division of cavalry, supported by the First Corps of 9,000 infantry, four miles off. Besides these there were approximately the 30,000 men of the Third, Eleventh and Twelfth Corps from eight to ten miles away. None of the Union troops were in motion.

On the morning of July 1, 1863, General Heth's division of Hill's Confederate Corps marched on Gettysburg to

capture some shoes for his men, followed by Pender's division. Buford's cavalry had been put in position some two miles in front of the town, squarely across the road to Cashtown, and opposed Heth's advance. These opposing

troops collided about 9.30 A.M., on Wednesday, July I. Buford's position made the concentration of the Confederate army at Gettysburg impossible unless he was brushed away. That was the job now undertaken by Heth, which precipitated the greatest battle of the Civil War. Heth, acting under Lee's orders, did not know this, but thought he was making a simple raid for shoes.

Buford had detected the advantages of Gettysburg, and determined to hold the town until he could hear from Reynolds. He had been fully convinced as

early as the night previous that the whole Confederate army was converging on Gettysburg. He sent a courier to Reynolds with the information that the Confederates in force were coming down the Cashtown pike, and asking for help and directions. Reynolds, burning to fight at the first opportunity, immediately put the First Corps, under Doubleday, in motion to support Buford, and despatched orders to the Third and Eleventh Corps, further in the rear, to move forward rapidly. His oppor-

tunity had come. The Pipe Creek line dropped out of his mind instantly, and he made ready for battle.

He then rode forward rapidly to join Buford at the front. The two generals went up into the belfry of the seminary,



GENERAL JAMES LONGSTREET.

situated on Oak Ridge. An examination of Heth's lines and the road beyond Willoughby's run through their field glasses disclosing the rapid advance of large bodies of Confederate infantry and artillery, corroborated Buford's shout to Reynolds on his arrival that the "devil was to pay." Reynolds came down and sent couriers in different directions to hurry forward the Union infantry. Buford's cavalry was now hard pressed and slowly yielding to Heth's advance.

Buford made a magnificent fight, holding the Confederates at bay for an hour or two. Heth had orders not to bring on a general engagement until Lee's army was all up, and his movements at first were leisurely. Archer's and Davis's Brigades were deployed on the right and left of the Cashtown road, and pushed forward towards Gettysburg and the shoes they so much needed.

Getting Into Position.

Reynolds after making a rapid examination of the field and surrounding topography, which was favorable for defensive military operations, and directing Buford to hold on, with the remark that he would bring up his entire three corps to this point, then rode off rapidly to bring forward his leading division of infantry, under General James S. Wadsworth. It was hurried across the fields and swung into line behind Buford, who, thus relieved, retired to the rear. General Cutler's Brigade was on the right of the Cashtown road, and Meredith's Brigade of Western troops, known in the army as the "Iron Brigade," on its left facing westward, Cutler confronting Davis and Meredith Archer.

It is pretty well attested that this great fight was opened by the Fifty-sixth Pennsylvania, under Colonel William Hoffman, though it has been disputed by the men of the Second Wisconsin, of the Iron Brigade. However this may be, Cutler's Brigade was struck partially in flank by Davis, and quickly repulsed and driven back. On the left the Iron Brigade, led by the Second Wisconsin, pushed forward for McPherson's wooded ridge simulta-

neously with Archer's entry into it from the west.

At that moment General Reynolds rode up from the right, where he had been anxiously observing Cutler's disaster. He ordered the Iron Brigade to advance at the double-quick, shouting to the Second Wisconsin, "Forward, men, forward, for God's sake, and drive those fellows out of the woods!" These were probably the last words he ever uttered. As he turned to look for and direct the oncoming supports he was struck in the head or upper neck by a sharpshooter's bullet and fell dead.

Death of Reynolds.

But his splendid troops rushed forward, driving the enemy back, clearing the wood and capturing General Archer and several hundred of his men. Thus perished the great soldier, John F. Reynolds. His death was a serious blow to the Union cause, and for the moment, for want of a directing head with prestige sufficient to give moral weight to his commands, endangered Union success. But his courage and ready decision determined the field of battle and, ultimately, the victory.

Cutler's lost ground was soon recovered by a brilliant charge of the Sixth Wisconsin, of the Iron Brigade, upon the flank of the Davis's Confederate brigade, in which it captured the Second Mississippi Regiment and its flag. Davis was repulsed, and in turn driven back greatly shattered. The Union lines were then rectified. The Second and Third Divisions of the First Corps now arrived, deploying to the right and left of Wadsworth under a heavy artillery fire. Thus in half an

hour Heth's advance had been checked with heavy loss.

But his two remaining brigades were brought forward, and Pender's fresh division of 8000 men were at hand. New dispositions were made and the battle renewed. Rodes had now appeared from the north, and was coming down upon the right flank of the Union line. Here were 24,000 Confederates converging on a single Union corps of 9000 effectives. Besides, Early, from York, was also arriving on its right rear, with 8000 more.

The unequal contest was terrible, but every effort of Heth, Pender and Rodes to break the heroic First Corps failed until late in the afternoon. It received no help until after mid-day, when General O. O. Howard's Eleventh Corps, 9000 strong, began to arrive.

Howard Driven Back.

Howard assumed general command. He sent two of his divisions to the north of Gettysburg to protect the right flank against Rodes and Early, the latter coming on from the north-east. General Steinwehr was held in reserve on Centerry Hill, which was fortified. But Early got upon the flank of Howard's troops, which were enfiladed by his artillery, and, aided by an onset of Rodes, they were broken and driven back through Gettysburg in disorder. This left the First Corps' right and rear uncovered, and, in turn, forced its rapid retreat through the town to the heights beyond, where it joined Steinwehr and formed a new line from Culp's Hill westward. The withdrawal of the First Corps occurred about 4 P. M. Many prisoners were lost by both corps in the retreat through the town.

General Lee arrived on Seminary Ridge in time to see the victorious advance of his troops and the disorganized Federals streaming up Cemetery Hill. He sent discretionary orders to Ewell to pursue, but that officer, engaged in readjusting his broken lines, made no further advance. He has been greatly criticised by Confederate partisans for his failure to follow up his advantages. But as the almost impregnable line of Culp's and Cemetery Hill was defeated by at least 10,000 men, 3,500 of whom had not fired a gun, supported by a powerful artillery, it is probable Ewell would have been repulsed had he attacked.

He reported that the position was formidable, and that it would have been absurd to attack it then in his condition. Night closed on the first day's battle at Gettysburg. A general battle had been precipitated by the fighting energy of General Reynolds, in spite of Lee's orders to delay an engagement until the whole army was up.

No Jackson There.

General Lee was now without his great leader and incomparable fighter, General T. J. Jackson, popularly called "Stonewall Jackson," and was compelled to bear the whole responsibility of the engagement. It was thought by many that if such an able general as Jackson had been on the field the final result might have been different.

The magnitude of this battle of the 1st set aside all theoretical schemes to decoy Lee down to Pipe creek. About midday General Meade, at Taneytown, was informed of Reynold's death and the state of the battle. Later Buford sent word that a "tremendous battle

was raging with varying success;" that "there seems to be no directing head," and that "we need help now." General Meade never hesitated when confronted with the necessity of changing his plan; he prepared to fight at Gettysburg. General W. S. Hancock was 'ent forward to assume command and

ent forward to assume command and rived on the months of t

GENERAL T. J. (STONEWALL) JACKSON.

advise Meade of the practicability of fighting a battle there. His report was favorable, and the whole army was immediately sent forward to Gettysburg.

Between sundown and 7 A. M. of July 1st the Second, Third, Fifth and Twelfth Corps had arrived and gone into position along Cemetery Ridge. The Sixth Corps, twenty-five miles away, did not arrive until afternoon. General Meade himself reached Gettysburg at mid-

night, and rode his lines, giving orders for the disposition of the troops as they arrived. General Hunt, its chief, placed the artillery.

On the Confederate side, with the exception of Pickett's division and Law's brigade, Longstreet's corps arrived on the morning of the 2d, and the

two armies were now concentrated face to face for battle.

General Sickles, with the Third Corps, in the absence of definite orders, had established himself somewhat to the front on the extreme left, on some high ground, forming a sort of salient in the main line. After some doubts whether to attack with Ewell on the Union right or its left, with Longstreet, General Leefinally selected Sickles as his point of attack on the 2d. Hood and McLaws were to attack up the Emmittsburg road from the south, while Hill pressed Sickles in front from the west.

The attack was not de-

livered until late in the afternoon, but, like all of Longstreet's work, it was delivered with great impetuosity and address when at last it came. Nearly half the Union army was brought to Sickles's aid during the battle, and the Confederate advance was only stopped about nightfall, but not until after Sickles had been wounded, his corps driven from its faulty position and the Union leaders almost in despair. It was a fearful trial.

But as Longstreet afterwards said, his success had driven the Third Corps back into its proper place, where the line was unassailable. Longstreet penetrated no vital part of the line, but he threatened the Union army with a great disaster when Hood's men began the ascent of Round Top ere it was occupied. But General Warren energetically brought troops upon the ground in time to repulse the enemy and save that vital position. Longstreet lost 5,000 men in these assaults, and the Union army an equal number.

Union Army Threatened.

Ewell was to have attacked the Union right beyond Culp's Hill simultaneously with Longstreet's movement, but the concert miscarried, and Ewell did not deliver battle until Longstreet's efforts had been exhausted or defeated. It was nearly night before Johnson and Early advanced, Rodes having failed to join in their attack. Early had some success at first along the east front of Cemetery Hill, but was eventually driven back with loss. Farther to the right Johnson's main attack was repulsed by the heroic Greene, but he occupied without opposition the breastworks of Ruger and Geary, withdrawn to reinforce Sickles.

This unexpected success threatened the Baltimore pike and the rear of the Union army, but it was too dark for the enemy to perceive their advantage. and they sunk to rest without further In the night Ruger's and Geary's commands returned; finding the Confederates in possession, the leaders made dispositions to attack at daylight and drive them out.

positions obtained by Longstreet on the Union left on the high ground along the Emmittsburg road and close up to the Round Tops, and by Ewell on the right, determined Lee to persist in his attack on the Third. It was concluded to be feasible to break the Union centre along the west front of Cemetery Ridge, held by Hancock with the Second Corps and part of the First Corps. Pickett's division of the fifteen Virginia regiments had arrived from Chambersburg.

This, with Heth's division, was selected for the work in hand. Pettigrew in command of the latter in the absence of Heth, wounded. Pickett was on the right and Pettigrew on the left; the former was to be supported by Wilcox and Perry's brigades, the latter by Lane and Scales. Altogether the attacking column consisted of not less than 15,000 men, but Pettigrew's troops were unfit for so desperate an undertaking by reason of their fearful losses on the 1st.

A Hard Struggle.

While these preparations were in progress for the final assault a heavy battle had begun on the Union right for the possession of the abandoned breastworks of the Twelfth Corps. General Williams, who commanded it, attacked Ewell at daylight with the divisions of Ruger and Geary, and the battle continued with varying fortunes until after 10 o'clock. Finally Johnson's Confederates, driven back at all points, sullenly retired across Rock creek, and with their retreat the battle of Gettysburg ended on the Union right in decisive victory. On the whole, Although practically repulsed, the lafter the first day's success, Ewell's

efforts throughout the battle had been feeble and unavailing. He had been unable to bring the decimated division of Rodes into action at all, and Early and Johnson had been squarely defeated. These were the results on the right.

Thunder of Guns.

The grand assault of Pickett and Pettigrew, under Longstreet, was preceded at about I P. M. by a tremendous artillery fire from 150 Confederate cannon, responded to by perhaps a hundred Union guns. This cannonade continued for nearly two hours, causing great havoc inside the Union lines, but no great loss of life. It failed to shake the Union soldiery. By order of General Hunt the Union fire was slackened and finally ceased entirely to give opportunity to bring up fresh batteries and ammunition to meet a heavy infantry assault which it was already divined by the Union leaders was now impending. It soon developed.

To reach the Federal lines the Confederates had to march a mile over open rolling fields under fire of many batteries. Their lines of battle, nearly a mile long, swept out of the woods along Seminary Ridge about 3.30 P. M., and the crisis of the battle was at hand. Their advance was watched hopefully by Lee and Longstreet, and eagerly by thousands of admiring eyes on both sides. The Federal soldiers were not unnerved by the threatening sight; the soldiers of Hancock were coolly waiting to redeem their losses at Fredericksburg.

As they came on the Federal shot and shell and then canister from a hundred guns began to tear wide gaps

from front and flank; their line was enfiladed by the batteries on Round Top. Pettigrew's men on the left began to drift and lag behind under the weight of the Union fire, and Pickett was soon in the lead alone. When within a third of a mile of the Union front Pickett halted, coolly readjusted his lines and changing direction more toward the left, resumed his advance.

Mad Rush of Federals.

Wilcox and Perry did not change their direction, but kept straight on, and soon there was a considerable interval between them and Pickett on the latter's right. Pickett first struck General Hays's advanced troops, and then Gibbon's division. Some of them were slightly pressed back at first, but the Confederates were quickly overwhelmed by the mad rush of the charging Federals. General Stannard's Vermont brigade changed front and attacked Pickett in flank, in the interval caused by the movement of Wilcox and Perry crowding Kemper's brigade back upon the centre and capturing many prisoners.

At the foot of the acclivity, led by Armistead, with his hat upon his sword point, the Confederates made a last feeble rush, and penetrated among some of the Union guns. But attacked on all sides by the men of Webb, Hall, Harrow and Stannard, they were driven back in utter rout. Garnett and Armistead were killed and Kemper wounded. Pickett lost in this ill-fated charge 3,000 men in about an hour's time. He had no chance from the first. Only a portion of Pettigrew's command reached the front on the Confederate left; they in their lines. This frightful fire came | were easily beaten off by Hays' well-

vision in front, and the omnipresent Stannard in flank, and beaten easily, losing heavily.

During the day a heavy cavalry battle had been fought for possession of the Baltimore pike in the Union rear, between Stuart and Gregg, and Stuart's designs were thwarted. He drew off discomfited. Thus, his troops beaten at all points, Lee's hopes were shattered. He ventured no more offensive movements. He expected a counter attack, but Meade was satisfied with the results already obtained, and awaited Lee's movements. That night Lee began to send his trains and wounded to the rear, while he held a fortified line along Seminary Ridge throughout the 4th to cover their removal.

After nightfall on the 4th he quietly retired from Meade's front by | brilliancy. The remainder of the Civil the Fairfield road toward Hagerstown, and the invasion of Pennsylvania had come to an inglorious end within ten days of the time Longstreet and Hill crossed the Potomac to the support of Ewell.

This pivotal battle marked the turn-'ng point in the success of the Confed- historic field of Gettysburg.

posted troops who captured nearly | erates with as gallant an army as ever 1,500 prisoners. Wilcox on the ex- faced an enemy, and under a generaltreme right, was met by Caldwell's di- ship unequalled for strategy, dash and



GENERAL ROBERT E. LEE-COMMANDER-IN-CHIEF OF CONFEDERATE ARMY.

War was merely the closing of the great tragedy. Other battles were fought and the brave Southerners continued the struggle with a courage and desperation that challenged the admiration of the world, but their fate was sealed and their hopes vanished at the bloody,

CHAPTER XXV.

Battle of Inkerman and Capture of the Malakoff.

NKERMAN has been rightly called the "Soldiers' Victory," but it might be still more justly styled "The British Soldiers' Battle." It was from first to last-from its unexpected opening at early dawn, through all its changing episodes in the hours before noon and until midday brought the crisis, through attack and counterattack, offence and defence, onslaught and recoil—one of the finest feats of arms accomplished by British troops. It takes rank with Agincourt, Rorke's Drift, the defence of Lucknow; with New Orleans and Waterloo: equal to the best of these, overshadowing some, surpassing others; in its way unique a bright and shining tribute to the warlike courage of a nation already laurelcrowned.

Many British battles have been won against great odds, under tremendous disadvantages; but none have better shown inflexible, unconquerable tenacity than Inkerman. It was fighting for safety too; had the British been defeated at Inkerman their army would have been swept into the sea; but these great issues were not fully realized by the rank-and-file.

They knew they must win the day: that was their business, as it always is. But the fact that they were so near losing it made no great difference to them—all they thought of was to come to blows, to try conclusions with the enemy, to charge him, bayonet him, shoot him: always supremely indiffer-

ent to his vast numerical superiority. and quite undismayed by his courage.

So it was that the strange spectacle was seen of a handful resisting thousands, of a weak company charging through battalion columns, of stalwart soldiers engaging a crowd of the enemy single-handed and putting them to rout. When ammunition ran short, as it often did in the deadliest episodes, the men tore up great stones and hurled them at the foe; a few scores of gunners, when hard pressed, fought on with swords, and rammers, and sponges, and sticks, even with fists-for the story of the Clitheroe bruiser who felled Russian after Russian with knock-down blows is perfectly true.

Men so eager for the conflict found officers as willing to lead them; there was no hesitation, no waiting to reform, to rejoin regiments; any broken body gathered round any commander, all were ready to stand fast and die, go forward and die, do anything but re-"What shall I do?" asked Colonel Egerton, at the head of his bare 200, when pitted against unknown "Fire a volley and charge!" numbers. at once answered the brigadier; and his aide-de-camp, young Hugh Clifford, sprang to the front to be in with the first fight.

General Pennefather, at the end of five hours' fighting, when he had lost more than half his small force, did not abate his confidence one jot: if Lord Raglan now would only give him a few more men, he said, he would finish the battle out of hand and "lick the enemy to the devil." Waterloo was "hard pounding," as Wellington quietly remarked afterwards, but it was nothing to Inkerman.

A Slow Siege.

The battle of Inkerman was brought about by the restored confidence that great and overwhelming reinforcements gave the Russian generals inside Sebastopol. After the successful landing, the victory of the Alma, the unimpeded flank march to the south side of the still incomplete fortress, the allied English and French had achieved no fresh triumphs. Prudence had overruled the daring but not quite unwarranted counsels to go straight in against Sebastopol; an immediate attack was deemed too dangerous, the golden opportunity passed, and it became necessary to sit down before the stronghold and reduce it by the slow processes of a siege.

The allies were thus planted in a corner of the Crimea, committed to the highland or upland of the Chersonese, as it was called, the only ground they could possibly occupy when attacking Sebastopol from the south side—ground that no one would have selected had choice been unfettered, for it was rugged, inhospitable, very extensive, and above all exposed on one flank right round, almost to the very rear. Balaclava, the British base of supply, at a distance of six miles from the front, lay open to attack by an enterprising enemy, and almost the whole length of road which connected it with the British camp.

How fully the Russians realized this,

how nearly they overbore the weak resistance offered by the Turks who defended this vulnerable point, how nobly a handful of British cavalry spent itself in beating back disaster is a well known story.

Prince Mentschikoff, who commanded the Russian forces in and about Sebastopol, exultantly foresaw the complete annihilation of the allies. He believed that they were at the end of their tether. In his reports to St. Petersburg he declared that the enemy never dared now to venture out of his lines, his guns were silent, his infantry paralyzed, his cavalry did not exist.

Great Russian Host.

The Russians, on the other hand, were once more enormously in the ascendant: troops had been pouring into Sebastopol continuously all through the month of October, 1854; a whole army corps had arrived from Odessa; two other divisions were close at hand on the 2d of November, and by the 4th, the eve of the battle of Inkerman, the total of the land forces assembled in and around the fortress must have been quite 120,000 men. This total was just double that of the allies, including the Turks, available for all purposes, including the siege of a great fortress, which alone might claim the whole efforts of the army.

No wonder, then, that Mentschikoff was full of confidence, that he counted upon an easy triumph, nothing less than sweeping the allies off the upland into the sea. "The enemy," he wrote, "cannot effect his retreat without exposing himself to immense losses. Nothing can save him from a complete disaster. Future times, I am confident, will pre-

serve the remembrance of the exemplary chastisement inflicted upon the presumption of the allies." Two of the Czar's sons were hurried post-haste to the Crimea to stimulate the enthusiasm of the troops and witness their splendid triumph.

Some inkling of the impending disaster—prematurely so called, as was soon to be proved—crept out and gave general uneasiness even at a distance from the theatre of war. Friends in Russia warned friends in England to anticipate terrible news. The great effort approaching was prepared under the direction of the Czar himself, and was of a nature and extent to deal an overwhelming blow.

Another Battle at Hand.

In the Crimea itself vague intelligence reached the allied commanders that a terrible struggle was near at hand. Reports of the reinforcements arriving, of the stir and activity within the fortress, the repair of roads, the mending of bridges, all the indications that are plain as print to the experienced military intelligence, warned Lord Raglan and General Canrobert to be on the lookout for another momentous battle, for which, in truth, they were but badly prepared.

Some idea of the disproportion between the armies about to come into collision will rightly be given here, so that we realize at once how overmatched were the allies, how marvellous therefore was their prolonged resistance and eventual triumph on that now historic 5th of November, the Inkerman Sunday which in British annals has eclipsed that other anniversary of the Gunpowder plot.

It has been said above that the Russian forces totalled 120,000 in all. Of these rather more than half, or 70,000 men, were actually present in the field. All took part in the action, but some only as covering forces or engaged in feints: these numbered some 30,000; the remainder, just 40,000, composed the attacking columns, and fought the battle of Inkerman. The whole allied strength that day upon the upland of the Chersonese was 65,000, but barely a quarter of these numbers could be or, as a matter of fact, were used in the coming From first to last the total French and English forces on the ground were just 15,683—half of each, but more exactly 7,464 English and 8,219 French -and of the latter 3,570 were actually engaged. There is no mistake or exaggeration in these figures, which are based on official returns on both sides.

Few Against Many.

It must, moreover, be carefully borne in mind that only a proportion, and a small proportion, of these 15,000 were on hand in the early stages of the fight. For hours the brunt of the battle fell upon the 2d division, which was barely 3,000, although opposed to 40,000, and the reinforcements came to them in driblets slowly and affording but meagre assistance and relief. It is from the extraordinary tenacity shown by British soldiers in their prolonged and indomitable resistance against such tremendous odds that such great glory was achieved at Inkerman.

The allied weakness, of which Lord Raglan was fully aware, was caused by the stress laid upon their forces by the siege operations and the need of protecting their communications. The troops, taking them from west to east and so to the south and rear, covered a hont which was twenty miles long. Before Sebastopol the French were on the left, the English on the right; but General Canrobert, always anxious for the rear of his position, kept a large force on the heights above the Tchernaya valley, and the English perforce garrisoned and defended Balaclava.

Defence Weakened.

Hence on the right flank of the British front, round about Inkerman as it came to be called (although the real site of old Inkerman is on the opposite side of the Tchernaya river), the defence was greatly impoverished, being limited in the first instance to a few weak battalions of the 2d division. Its immediate support—none too close—was a brigade of the Light Division under General Codrington on the Victoria Ridge adjoining, but on the other side of a wide rough ravine; behind, and three-quarters of a mile off, was the brigade of Guards, twice that distance the 2d brigade (Buller's) of the Light Division; the 4th and 3d divisions, fronting Sebastopol and more or less appropriated to the siege works, were two or three miles removed from the extreme right flank.

A French army corps under Bosquet was, however, within the lesser distance, holding the eastern heights which gave General Canrobert so much concern. But the forces thus described made up the sum total of the allied armed strength, and every portion had its particular place and specified duties. None could well be withdrawn from any part without denuding it of troops or dangerously weakening the long defensive line.

There were, in fact, no reserves, no second line to call up in extreme emergency to stiffen and reinforce the first. The allies were fighting with their backs to the wall. Retreat was impossible because there were no fresh troops to interpose and cover it.

Serious Situation.

The weakness of the 2d division in such an isolated and exposed position had long been a source of serious misgiving. Its commander, Sir DeLacy Evans, deemed his force—weakened. moreover, by constant outpost dutyto be perilously small. He called it "most serious." Sir George Brown. who commanded the Light Division, was equally solicitous. Lord Raglan, the general-in-chief, knew the danger too; he reported home that his men of the 2d division were well posted. "but there were not enough of them." But he was ever buoyant and hopeful, anticipating no great trouble, yet alive to his perils and fully prepared to meet them. "We have plenty to think of," he wrote to the English War Minister, "and all I can say is that we will do our best."

Strange to say, that best did not include any artificial strengthening of the position by entrenchments. The ground was admirably suited for defence, and might have been made all but impregnable—or, at least, capable of withstanding even determined attacks. Earthworks would have gone far to redress the balance of numbers telling so heavily against the allies; but only one meager barrier was erected, and even this was destined to prove of inestimable value in the battle.

The prompt use of the spade was not

then deemed an essential part of the soldier's field training, and, as the opening of the trenches before Sebastopol had entailed much labor of that kind, the troops were spared more of it, even although indispensably necessary as everyone now knows.

Superior Numbers.

The Russian general had not failed to detect the inherent defects in the British line or to note carefully its weakest point. Upon this he based his plan of operations. He meant to envelop and crush the exposed right flank by vastly superior numbers, while well-timed demonstrations that might be expanded into attacks should occupy the allied forces at other parts of the field. This simple and perfectly plausible scheme was to be worked out as follows:

Two great columns, making up a combined strength of 40,000 men, with 135 guns, were to constitute the main, the most weighty, and as it came to pass, the only real attack. Both were drawn from the newly-arrived 4th or Dannenberg's Army Corps. One, called the 10th Russian Division, commanded by General Soimonoff, which had entered and was actually quartered within Sebastopol, was to take one flank, the left of the English position; the other, under General Pauloff, the 11th division, still outside the fortress and lying north of the Tchernaya river, was to attack the English right.

Soimonoff's force was strengthened by other regiments in the garrison, and its infantry strength was 19,000, his guns 38 in number. He was to issue from Sebastopol at a point between the Malakoff Hill and the Little Redan, then follow the course of the Carenage ravine, and to come out on the northern slopes of Mount Inkerman, where he was to join hands with Pauloff, who, marching from the heights of Inkerman on the far side of the Tchernaya, was to cross that river and the low swampy ground that margined its course by the bridge near its mouth.

Expected Sweeping Victory.

This general commanded 16,000 infantry and had with him of guns. His orders were to ascend the northern slopes of Mount Inkerman and push on vigorously till he met with Soimonoff. When thus combined the whole force of 40,000 (including artillerymen) was to come under the direction of the Army Corps commander, General Dannenberg, and his orders were to press forward and carry all before him. It was confidently expected that nothing could withstand him—that he would "roll up" the weak opposition of the English right, beat all that he encountered and sweep victoriously onward right past the Windmill Hill to the eastern heights in the rear, and within easy distance of Balaclava.

Meanwhile, Prince Gortschakoff, who now commanded the army hitherto known as Liprandi's, in the valley of the Tchernaya, and had under him a force of 22,000, with 88 guns, was to "contain" Bosquet—occupy his attention, that is to say, by feints and false attacks upon his position, so that he should be held to these heights and unable to reinforce the English right.

Later, when the main attack had prospered and Dannenberg's victorious troops were seen well to the south of Windmill Hill, Gortschakoff's demon-

strations were to be converted into a real attack. He was to go up against the heights with all his force, drive back Bosquet, join hands with Dannenberg, and the Russians would then be in triumphant possession of the greater part of the Chersonese upland. After that the siege must be raised, the allies must be swept off the plateau, destroyed, taken prisoner, or hurried into disastrous flight upon their ships.

To Move In Force.

A third conditional operation was entrusted to the troops remaining in garrison, under the command of General Moller. He was to closely "watch the progress of the battle," cover the right of the attacking troops with his artillery without attempting to reply to the fire of the allied siege-guns. Whenever confusion showed itself in the trenches, due to the great wave of victory setting from the eastward, he was to move out in force, attack and seize the siege-batteries.

Capable military critics have not failed to condemn the foregoing plan of operations. It erred, in the main attack, by trusting too entirely to numbers, crowding great masses of men on ground not spacious enough to hold them. There was not sufficient room, indeed, upon the Russian battlefield for half the forces engaged. Moreover. this ground, imperfectly known to the men who held it and might have carefully studied it, was cut in two by a great ridge, which divided the two columns intended to join forces, and prevented their combined action.

General Dannenberg appears to have realized this difficulty and wished his two generals, Soimonoff and Pauloff, to act independently, the former directing his efforts against the Victoria Ridge, altogether to the westward of Mount Inkerman, and leaving the latter ample space to manœuvre. But Dannenberg's wishes were not distinct orders, and Soimonoff, obeying Mentschikoff, the general-in-chief, held on to the original plan.

Again, Gortschakoff's role condemned him to play a waiting game, and give no effective help until that help was no longer urgently required. He was to do nothing, in fact, until the main attack had actually succeeded. The longer the enemy resisted, the longer he remained inactive. Had he exerted a stronger pressure, had his feints been pushed with more insistence, he would have paralyzed the movement of the French with Bosquet, and by the very direction of his attack weakened the English defence at Inkerman. "His advance was, however, left to depend upon a contingency that never occurred"-and while he waited for it his 22,000 men were of absolutely no use in the fight.

Rough Battle Field.

The whole surface of the field of battle was thickly covered with brushwood and low coppice, amidst which crags and rocky boulders reared their heads. In some places the woods gathered into dense forest glades, and in others the ravines were steeply-scarped quarries difficult of access.

Soimonoff started at 5 A. M., amid darkness and mist, which so favored his march that he reached Mount Inkerman unobserved, and then and there seizing its highest point, Shell Hill, he placed his guns in battery on the crest

quite unknown to the British outposts. I fore the alarm was raised. They were The night had been reported unusually | pressed back fighting, while the guns quiet, although some fancied they heard on Shell Hill opened a destructive fire.



VIEW OF TOWN AND FORTRESS OF SEBASTOPOL.

the rumbling of distant wheels—the wheels, in fact, of Pauloff's artillery. Just before dawn, too—it was Sunday morning—all the bells of Sebastopol rang out a joyous peal, not for worship, but to stimulate the courage of the pious Russian soldiery.

But outpost duty in those days was imperfectly performed, and the enemy

General Pennefather, who was in temporary command of the 2d division, realized at once that serious events were at hand. It was not in his nature to retreat before the coming storm. He was a "fine fighter;" in another rank of life he would have been in his element with a "bit of a twig" at Donnybrook Fair. "Whenever you see a was on top of the British pickets be- head, hit it" was his favorite maxim in

war; and now, where a more cautious leader would have drawn off and lined the Home Ridge in defensive battle, he thrust forward with all his meagre forces to meet the Russian attack.

This daring system was greatly aided by the state of the atmosphere; in the fog and mist no notion of the pitiful number of their opponents reached the Russians, and the handful of English forgot that they were unsupported and so few. Pennefather's plan, born of his fighting propensities and indomitable pluck, found favor with his superiors, for when presently Lord Raglan, the English commander-in-chief, came upon the ground, he did not attempt to interfere, but left the audacious Irishman the uninterrupted control of the fight.

Russian Column Shattered.

They were meagre indeed—these first English defenders of Mount Inkerman. Pennefather had of his own barely 3,000 men all told, and only 500 men came up in the first instance to reinforce him. But he sent all he had down in the brushwood out in front till it was filled with a slender line. Meanwhile Soimonoff, waxing impatient and having all ready, was determined to begin without waiting for Pauloff's co-operation. His guns on Shell Hill had "prepared" his advance, and soon after 7 A. M. he sent three separate columns against the left of the British position on Home Ridge.

The first of these, on the extreme right, under road column, as it was called, got a long way round, when it met a wing of the 47th under Fordyce and a Guards picket under Prince Edward of Saxe-Weimar, before whom it turned tail; the second column had no better fortune on the Miriakoff spur;

the third, following up the course of the Miriakoff glen, encountered a wing of the 49th under Grant, who at once gave the order to "fire a volley and charge." His counter-attack was delivered with such determination that it carried all before it; the Russian column was fairly broken up and driven helter-skelter under the guns on Shell Hill.

Smote Fiercely.

Now Soimonoff came on in person at the head of twelve battalions, nearly 9,000 men. His aim was the centre and left centre of the allies, and for a time he made good progress. But the first supports, those from the Light Division, arriving, Pennefather at once used them against Soimonoff. He sent on the 88th Connaught Rangers, 400 of them who, feeling the whole weight of the attack, recoiled, and retreating left the three guns of Townshend's battery in the enemy's hands. Then the 77th under Egerton, but led also by the brigadier Buller, came up and caught Soimonoff's outside column—caught it and smote it so fiercely that it fled and was no more seen on the field.

These Russians were 1,500 strong. Egerton had no more than 250, but he never faltered, and his men, answering like hounds to his cry, tore straight on at the run and smashed in with irresistible fury. There was an interval of raging turmoil in which the bayonets made fearful havoc; then the Russians ran, Egerton pursuing at the charge to the foot of Shell Hill. About this time General Soimonoff was killed. Egerton's action had wide-reaching consequences. Through it the abandoned three guns were recovered, the 88th rallied, the 77th themselves or their rem-

nant held fast for hours the ground it had secured.

These combats disposed of about half the forces Soimonoff had put forward in this attack. The remainder had advanced courageously against the allied centre by both sides of the post-road; but they also were beaten back, partly by the fire of field guns, partly by the spirited charge of a couple of hundred men of the 44th under Bellairs.

Russians Repulsed.

Thus in less than an hour Soimonoff's great effort was repulsed; he himself was slain, and his men driven off the field. For this portion of the 10th Russian division never regained cohesion as a formed military force. It was no mere defeat but an absolute overthrow, in which regiments melted away and the whole force was ruined. Many excuses have been offered for their want of success: the dense mist giving exaggerated value to the handful that faced them, they perhaps thought the enterprise too difficult.

It is also certain that the English fire was murderously effective upon these compact columns of attack; some were absolutely decimated, others lost nearly all their officers, and all were so shattered and disorganized that no part of them returned to the fight. They ought, nevertheless, to have done better; with such greatly superior forces, backed up by the incessant fire of a formidable artillery, success would probably have awaited bolder and braver men.

Meanwhile a portion of Pauloff's division had arrived by a shorter and more direct road, while the rest had circled round after Soimonoff. Some

once attracted by the Sandbag Battery, and, soon taking it from the sergeants' guard that held it, made this hollow vantage-ground their own. A mass of men, three great columns, supported this attack, and Pennefather sent General Adams against them with the 41st Regiment.

He went forward in extended order with a wide front of fire, and the Russians soon fell away; those in the battery evacuated it; the columns supporting broke and dropped piecemeal into the valley. In this splendid affair 500 men disposed of 4,000. Again, at the Barrier, which the rest of Pauloff's men approached with great determination, a small body, the wing of the 30th Regiment under Colonel Mauleverer, achieved an equal triumph—that of 200 over 2,000. Here it was the British bayonet that told, for the men's firelocks were soaking wet and the caps would not explode.

Daring Bravery.

But Mauleverer trusted to the cold steel. Officers leapt down daringly in among the Russians; men followed at the charge: the head of the leading column was struck with such impetus that it turned in hasty retreat, causing hopeless confusion in the columns behind, and all fled, a broken throng of fugitives, hundreds upon hundreds, chased by seven or eight score.

This ended the first Russian onslaught. Half Soimonoff's division was beaten out of sight; 6,000 men were lost to Pauloff. At least 15,000 out of 25,-000 were "extirpated," as the Russians admit in their official accounts, and this by no superior generalship but by of these people of Pauloff's were at the dogged valor, the undismayed resistance, of just 3,500 Englishmen. It was a good omen for the issue of the day's fighting, but the end was not yet, and a further terrible stress was still to be imposed upon the overmatched troops.

Eager for Battle.

Supports, such as they were, now begun to arrive. The alarm had spread across the upland rousing every soul, and in every camp near and far the assembly sounded, men rushed to arms, halfdressed, fasting, eager only to hurry into the fight. Some of the Light Division, as we have seen, had been already engaged. General Codrington with the rest was in battle array, holding the Victoria Ridge with scanty forces. The Guards' brigade, 1,200 men, under the Duke of Cambridge, was approaching, 700 already close to the Home Ridge; the 4th division under Sir George Cathcart, 2,000 strong, was also near at hand. These, with the field-batteries, raised the reinforcements to a total of 4,700 men.

Two French battalions had been despatched to support Pennefather, although from some misunderstanding they were not utilized, and Bosquet, who had come up with them, returned to the Eastern Heights, where he was still menaced by Gortschakoff. It was not until much later in the day that General Bosquet realized that the Russians in front of him were only pretending to attack, and then he hurried with substantial forces to Mount Inkerman. But until then he allowed himself to be tied, ineffectively to the wrong place, giving no assistance in the main fight and certain to be "rolled up" in his turn if that fight ended disastrously for the English.

General Dannenberg had now assumed the chief command, and, undaunted by the first failure, he set about organizing a fresh attack. He had at his disposal 19,000 fresh and untouched troops: Soimonoff's reserves and Pauloff's regiments which had come round by the lower road. The latter, 10,000 strong, were sent against the English centre and right, their first task being the recapture of the Sandbag Battery, General Adams was still here with his 700 men of the 41st Regiment, and he made a firm stand; 4,000 men attacked him again and again with far more courage and persistence than any Russian troops had yet shown; and at last, still fighting inch by inch Adams fell back, leaving the battery in the enemy's hands.

Taken and Re-taken.

Now the Guards came up under the Duke of Cambridge, and replacing Adams, went forward with a rush and recovered it, only to find it a useless possession. It was presently vacated by one lot, re-entered by the Russians, recaptured by another lot, and then again the Russians, imagining it to be an essential feature in the allied defence, concentrated their force to again attack it. Once more they took it, once more the Guards returned, and with irresistible energy drove them out. Thus the tide of battle ebbed and flowed around this empty carcase, and to neither side did its possession mean loss or gain.

The 4th division, under Sir George Cathcart, had now arrived upon the ground. He had just 2,000 men, and of these four-fifths were speedily distributed in fragments to stiffen and sup-

port Pennefather's fighting line just where he thought they were most required. With the small residue, not 400 men, Cathcart was ready for any adventure. There was a gap in the English line between Pennefather's right and the Guards struggling about the Sandbag Battery, and this opening Cathcart was desired to fill. The order came direct from Lord Raglan, who was now in the field; but Cathcart thought fit to act otherwise, believing that there was an opening for a decisive flank attack.

Rushed Like a Torrent.

He meant to strike at the left of the Russians, and leaving his vantage ground above he descended the steep slopes with his 400 men. The offensive movement was taken up by the troops nearest him—Guards, 20th, 95th. All the men gathered about the Sandbag Battery rushed headlong like a torrent down the hillside, and following up this fancied advantage, jeopardized the battle. For the gap which Cathcart had been ordered to occupy became filled by a heavy column of Rus sians, who took their enemy in reverse and cut them completely off.

"I fear we are in a mess," said Cathcart, taking in the situation; and almost directly afterwards he was shot through the heart. Only by a desperate effort, a series of personal hand-to-hand combats fought by small units courageously led by junior officers, even by non-combatant doctors, did the English regain touch with their own people. They were aided, too, by the opportune advance of a French regiment, which took the interposing Russians in flank and drove them off. But

if this mad adventure of Cathcart's escaped the most disastrous consequences, its effect, nevertheless, was to still further break up and disseminate the already weakened and half-spent forces of the allies.

Forced Slowly Back.

All this time, Dannenberg had been pressing hard upon the allied centre. Here his attacking column met first Mauleverer with his victorious army of the 30th, and forced them slowly and reluctantly back, but was itself repulsed by a fresh army of the Rifle Brigade and driven down into the Quarry. Thence it again emerged, reinforced, and moved by the right against the Home Ridge. It was in these advances that they penetrated the gap just mentioned and got upon the rear of Cathcart and the Guards.

But the westernmost columns were charged by a portion of the 4th division, the 21st and 63d regiments, overthrown and pursued; while the Russian attack on the right of the Home Ridge was met by General Goldie with the 20th and 57th, also of the 4th division. Both these regiments were notable fighters, with very glorious traditions: the "Minden yell" of the 20th had stricken fear into its enemies for more than a century, and the 57th "Die Hards" had gained that imperishable title of honor at Albuera. "Fiftyseventh, remember Albuera!" was a battle-cry that sent them with terrible fury into the Russian ranks, and these two gallant regiments hunted their game right down into the Ouarry.

Once more the most strenuous efforts of the enemy had failed, with what a cost of heroic lives history still proudly tells. Dannenberg, however, if disheartened was not yet hopeless. He knew that the allies were hard pressed; if he himself had suffered so had they, and more severely. He had still 10,000 men in hand; many of them, although once worsted, were still not disorganized or disheartened, and his reserves —9,000 more—were still intact, while guns a hundred in number held the mastery from Shell Hill.

Half were Lost.

Of the English forces, never more than 5,000 strong, half had been destroyed or annulled. True, the French had come upon the ground with two battalions, 1,600 men; but Bosquet, with the main part of his command, was still a long way behind. Dannenberg resolved to make another and more determined attack upon the centre of the English position, aiming for that Home Ridge, as it was called, which was the inner and last line of the allied defence.

The Russians came on with a strength of 6,000 assailants, formed, as before, in a dense column of attack. One led the van, the main trunk followed, flanked by the others, and all coming up out of the now memorable Quarry Ravine. Pennefather had some 500 or 600 to hold the ridge, remnants of the 55th, 95th, and 77th regiments, and a French battalion of the 7th Leger, with a small detachment of Zouaves.

These were very inadequate forces, and the Russians, pushing home with more heart than they had hitherto shown, crowned the crest and broke over the inner slopes of the ridge. The 7th Leger had not much stomach for the fight, but were pushed on by the

Zouaves and the men of the 77th, still led by the intrepid Egerton. By this time the main trunk column of the enemy had swept over the Barrier at the head of the Quarry, and the small force of defenders retired sullenly behind the Home Ridge.

Critical Moment.

Now the position seemed in imminent danger, and this was, perhaps, the most critical period in the battle. But the advance of the Russians, although in overwhelming strength, was checked by another daring charge—that of a handful of the 55th (thirty, no more) under Colonel Danberry, who went headlong into the thick of one of the rearmost Russian battalions. This small body of heroes tore through the mass by slieer strength, as if it were a foot-ball scrooge, using their bayonets and their butt-ends, even their fists, fighting desperately till they "cleft a path through the battalion from flank to flank, and came out at last in open air on the east of the great trunk column."

The noise of tunult in the rear and the vague sense of discomfiture and defeat shook the leading assailants, and the Russians first halted irresolute then turned and retired. At this time, too, one of the flanking columns, moving up on the Russian right, encountered the 21st and 63d regiments, and was promptly charged and driven back by these regiments, which re-possessed themselves of the Barrier and held it. Then the Russian left column, worsted by British artiilery and the French 7th Leger, also retired.

It was now but little past 9 A. M., and as yet the battle, although going against

the Russians, was still neither lost nor won. They still held the ascendant on Shell Hill, still had their reserves. Lord Raglan, on the other hand, could not draw upon a single man, and Bosquet's main force was still a long way off. Now, too, the French got into some difficulty upon the right above the Sandbag Battery, and were in imminent danger of defeat. Moreover, the Russians made a fresh effort against the Barrier, coming up once again out of the Ouarry. The Barrier was held by the 21st and 63d, but the stress put upon them was great, and Pennefather sent on such scanty support as he could spare. Great slaughter ensued in this conflict. General Goldie, who was now in command of the 4th division, was killed, and other valuable officers.

Allied Guns.

The Russian artillery did deadly mischief, but now, by Lord Raglan's unerring foresight, it was to be met and overmatched by the allied guns. At an earlier hour of the morning he had sent back to the Siege Park for a couple of eighteen-pounders, guns that in the enormous development of artillery science we should think nothing of nowadays, but which at Inkerman were far superior to the Russian field-batteries. So eager were the gunners that these two famous eighteen-pounders were dragged up to the front with "man harness," by some hundred and fifty artillerymen and a crowd of eager officers.

The guns were placed in a commanding position and worked splendidly under the very eyes and with the warm approval of Lord Raglan. They soon established a superiority of fire and spread such havoc and confusion among

the Russian batteries on Shell Hill that the power of the latter began to wane. Victory, so long in the balance, was at last inclining to the side of the allies.

Issue in Danger.

Still the battle was not won. If the Russians did not renew their attacks. they still held their ground; and Bosquet, coming up presently with his whole strength, made a false move which nearly jeopardized the issue. The French general, having with him 3,000 infantry and 24 guns, "hankering after a flank attack," reached forward on the far right beyond the Sandbag Battery and the spurs adjoining. Here he fell among the enemy, found himself threatened to right and to left and in front, and, realizing his peril, hastily withdrew. Happily, the Russians did not seize the undoubted advantage that mere accident had brought them by Bosquet's injudicious and hazardous advance. Had they gathered strength for a fresh and vigorous onslaught upon the English right, they might perhaps have turned the scale against them.

The French were clearly discomfited and out of heart for a time. Then as the Russians made no forward move. Bosquet regained confidence; he threw forward his Zouaves and Algerines, and these active troops came upon some Russians which were slowly climbing the slopes, and hurled them down again in great disorder. Our old friends the 6th and 7th French regiments, the earliest on the field, advanced along the post-road towards the Barrier, where they were covered by the English. This, briefly told, was the sum total of the French performances at the battle of Inkerman.

It is well known to all who study war that, when the crisis of a battle comes, victory is for him who has the best disposable reserve in hand. Of the forces now engaged the French alone were in this happy situation; the English were all but exhausted. Lord Raglan, as has been said, had not a spare man. As for the Russians, Gortschakoff's supineness had robbed his comrades of the assistance of 20,000 men, and the general-in-chief, Mentschikoff, although close at hand on the field, did not see fit to bring up the reinforcements from the garrison of the town.

"What Can I Do?"

But now Marshal Canrobert, never a daring leader, was moved to desist from the fight. When he learnt that the English were all but spent, he would do nothing more, although he had a very large force of all arms now up and well in hand. No arguments, no appeals of Lord Raglan's would move him. "What can I—what can I do?" he asked querulously; "the Russians are everywhere." Had it been left to the French, the field would have been abandoned to the Russians, who were still in possession of the greater part of Mount Inkerman, and the battle would have been practically drawn.

On the other hand, a vigorous onslaught by the still fresh and untouched French might have carried the Flagstaff bastion and led to the capture of Sebastopol itself. But Canrobert was not the man to take so great a risk or jeopardize so many lives. It was left to Haines, who still held the Barrier, to move up against Shell Hill. Lord West seconded him in this bold endeavor, a young lieutenant of the 77th, Acton by

name, also went on with a mere handful, and Colonel Horsford came on in support with the remnant of the Rifle Brigade. All this time, too, Lord Raglan's 18-pounders were dealing death and destruction among the Russian batteries; and at last Dannenberg, under stress of this "murderous fire"—they are his own words—decided to limber up his guns and retire his whole force. This, in fact, was done, and about I P. M. the Russians admitted defeat.

Heavy Russian Losses.

If in this grand contest the allies were greatly outnumbered by the Russians, the latter suffered the most, their losses being four times as great as those of the victors. They had 12,000 killed and wounded, a large proportion of them left dead upon the field, among them 256 officers. The English lost 597 killed, 39 of them officers, and 3 general officers; 1,760 men and 91 officers wounded. The French lost 13 officers and 130 men killed and 36 officers and 750 men wounded.

These figures show plainly on whom the brunt of the fighting fell, and the enormous losses of the Russians were mainly due to the density of their columns of attack and the superiority of English musketry and artillery fire. A very large part of the English infantry at Inkerman were armed with the newfangled Minie rifle, and what powerful aid was afforded by the two 18-pounder guns has been already shown in the course of the narrative.

In this Crimean war the key to the situation was the renowned fortress of Sebastopol, and to capture this was the object of the allied armies of England, France and Turkey. These took up a

position near Balaclava, located south of Sebastopol, and began the siege of that vast fortress. The Russians made repeated attempts, with overwhelming masses of troops, to force the allied position, which led to the bloody battle of Inkerman, already described.

Two Main Outposts.

There were two main keys or outposts to the fortresses, one being the Redan and the other the Malakoff. These were provided with all the necessary means for a thorough defence. As the siege dragged on for many months the main efforts of the allied commanders finally were directed to closing in upon the defences of the town, and as a first step it was necessary to gair possession of the various outworks and advanced posts. These were the White Works. the Mamelon, the Quarries, the Malakoff, and the Redan. It was on June the 6th that a fresh bombardment was undertaken in order to reduce them, both the English and French guns being actively engaged—to the number of 544. The Mamelon was soon crushed, the White Works greatly damaged, and only the Malakoff was able to return the fire at the close of the day.

The cannonade was continued all through next day and towards dusk. Bosquet sent forward two brigades, and took possession of the White Works without serious opposition, which during the night were incorporated with the French trenches. On that same evening, June 7th, about 5.30, three French columns moved out boldly to attack the Mamelon, headed by a brave colonel, Brancion, who was slain just as his men triumphantly crowned the parapet. Another column of Turcos

took the works by the rear, and this combined attack was for a time perfectly successful; then the Russians, reinforced, made a counter-attack, retook the Mamelon, held it for a time, and were in their turn again expelled.

The entry of the French into this works was the signal for an attack upon the Quarries, and this tough job was entrusted to detachments of the 2d and Light Divisions, the whole under Colonel Shirley. These Quarries were soon carried, but, being at the rear, they were searched through and through by the enemy's guns, and proved untenable until the Russians came out and were mixed with the assailants. Then the fight rolled back and forward, the victory now inclining to this side, now to that. In the end, however, when dawn broke, the whole of the works the allies had attacked remained in their hands.

Awaiting Final Attack.

This substantial triumph greatly elated the allies. All who were engaged in it hoped that a turn was approaching in this wearisome siege, and impatiently awaited the final attack, which must now, surely, be soon made. This, indeed, was the fixed intention of the allied generals, and in the days following the last-named captures, measures were concerted to assault the inner and chief works of the town.

Even now the Emperor Napoleon persisted in advising field-operations, and continued to telegraph orders to Pelissier, the French commander, to that effect. The sturdy French general protested, pleading how impossible it was for him to exercise his command "at the end, sometimes paralyzing, of

an electric wire "—and still went his own way. To the emperor's last peremptory message he replied: "Tomorrow, at daybreak, in concert with the English, I attack the Redan, the Malakoff, and their dependent batteries. I am full of hope."

Bad Generalship.

Yet this great attack was foredoomed to failure. Everything went wrong, especially with the French commander-in-chief. It is now believed that Pelissier, although outwardly firm, was greatly harassed in mind by the continual interference of the emperor. Whatever the reason, he made mistake upon mistake. In the first place, he removed Bosquet from the command of the troops that were to attack the Malakoff, and substituted a general but lately landed, and quite ignorant of the ground, which Bosquet knew, as the French say, "as well as his own pocket."

In the second place, although it had been arranged with Lord Raglan that the attack should be preceded by a two days' cannonade, the fire of the 17th of June was not resumed by the French on the fatal morning of the 18th, and Pelissier suddenly decided to attack at daybreak without it. This, the anniversary of Waterloo, when two old foes now were to fight side by side, had been chosen on purpose, and yet it was to be associated with disaster. The French columns intended to assault the Malakoff found themselves mixed up and confused in the trenches. It was a brilliant starlight night, and the Russians, seeing them plainly, brought up all their strength to resist.

The assailants, when they moved forward, encountered fierce opposition

from dogged men posted behind works rapidly repaired, and the French presently retreated with considerable loss. The same misfortune met the English, for Lord Raglan, although aware of the French failure, felt bound to also attack. His men never got near the Redan—they were swept away in hundreds, as they crossed the open, by a storm of grape. Their leaders were killed, General Campbell and gallant Lacy Yea, and the remnant fell back disheartened.

Only at one point, down by the Creek battery, that fiery leader Sir William Eyre had penetrated the defence and entered the town. But he was wounded himself, and the lodgment made was relinquished, failing proper support.

Disaster Killed Him.

From this grievous disaster Lord Raglan, who was already in failing health, never recovered. The noble English soldier, who had long borne unmerited contumely in proud silence, content to do his duty to the utmost of his power, was now heartbroken at this defeat, and sinking gradually, he died ten days after the 18th of June. How greatly his fine character had impressed all who were joined with him in this chanceful campaign was shown by Pelissier's great grief at his death. The rugged, stern, intractable Frenchman had from the first evinced the highest respect and affection for his English colleague; and it is said that when Lord Raglan was no more, General Pelissier came and "stood by his bedside for upwards of an hour, crying like a child,"

But although Pelissier could yield thus to his generous emotions, he never weakened on the business in hand. Defeat only redoubled his dogged determination to succeed in his own way. This indomitable attitude at last won him the respect of his hitherto hostile superiors, and even the Emperor Napoleon, surrendered his beloved projects, admitted that now every effort must be concentrated on the siege. The affront of failure must now be wiped out—speedily, if possible, but at any rate surely.

Heaps of Dead.

Progress was still slow, but still the force crept steadily forward, until it approached in some places the very foot of the enemy's defences, while, without intermission, the war of weapons continued. The English had established an overwhelming superiority of fire, and their guns worked frightful havoc in the garrison. "Losses!" said a young Russian officer who had accompanied a flag of truce; "you don't know what the word means. You should see our batteries: the dead lie there in heaps and heaps." The Russians during the last bombardment lost from 1,000 to 1,500 a day.

Yet two more months passed, and the allies were still outside. Neither Pelissier, with his strong and masterful spirit, nor Sir James Simpson, Lord Raglan's successor—a much poorer creature—was disposed to risk failure again by another premature or ill-considered attack; and while they waited to make all sure, the enemy took his fate in both hands, and sought to relieve the nearly ruined fortress by one last great counterstroke.

The battle of the Tchernaya, or of Russians stood ready, their reserves in Tractir Bridge, fought on the 15th of hand, their guns loaded with grape. It

August, was a despairing but most vigorous attack upon the French right flank, where the newly arrived Italian—or, more exactly, Sardinian—allies were also posted. Thirty thousand Russians, under Generals Read and Liprandi, with a reserve of 19,000 more infantry, the whole supported by cavalry and a numerous artillery, came on at daylight, but attacked too soon the heights held strongly by the French, and were driven back with great slaughter. The Sardinians also fought well, and some horse artillery also took part in the fight.

Hope Abandoned.

The outcome still tarried, but all hope of holding Sebastopol was at an end. Since the commencement of the Crimean campaign the Russians had lost many thousands of men in the fortress and in the field, and their condition was nearly desperate. Preparations to evacuate the city were at last begun—the great bridge of retreat across the harbor, barricades and obstacles in the streets and approaches. Yet Prince Gortschakoff still hesitated, and wished at the eleventh hour to prolong the defence in spite of the tremendous sacrifice it would entail.

But now, at last, opportunity was ripe; the French most advanced trench was within five-and-twenty yards of the Malakoff, and the hour of attack was at hand.

Once more, and for the last time, the guns re-opened fire and blazed away incessantly on the 6th and 7th of September, doing, as usual, infinite injury; but in the early morning of the 8th the Russians stood ready, their reserves in hand, their guns loaded with grape. It

was not Pelissier's intention to attack the Malakoff—the principal point—before noon. He had observed that at that hour the old guards were relieved by the new, but that the one marched out of the works before the others replaced.

Gallant MacMahon.

This was the plan which the French general hugged so closely to his heart that, as he himself put it, he would not whisper it to his pillow. The general control of the attack was placed under Bosquet, but the actual assault of the Malakoff was entrusted to MacMalion. that fine soldier who, years later, became President of the French Republic. Other troops filled in the line towards the Redan, where the English, under General Windham, were to come into play; but theirs was essentially an inferior and subsidiary role, for under no circumstances should they have attacked the Redau alone. Further subordinate moves were to be made by the French on Flagstaff Bastion, while the Central Bastion was to be dealt with by the Sardinians.

At noon exactly, MacMahon's first brigade crossed the open at a run, and found the Malakoff nearly empty; but then the Russian relief came up, and a fierce hand-to-hand struggle began. Every traverse, every coign of vantage, was taken and retaken, the Russians fighting with desperate courage; and it was not until the French had broken into the work by its eastern face that victory inclined to their side. Still, the conflict was maintained until late in the afternoon, the Russians bringing up every reserve, but all to no purpose,

and finally the tricolor waved over the Malakoff. The key to the fortress was won.

Elsewhere fate had been adverse. The French columns on the left of the principal attack had not greatly prospered, while the English at the Redan had distinctly failed. No doubt they were more or less doomed to failure from the first; for the Russians retiring from the Malakoff, swarmed into the Redan and soon filled it with vast numbers, while the English assailants at best were few. Yet they went up undaunted; many boldly climbed over the huge parapet, and for some time maintained a firm front inside.

Fall of the Citadel.

Unfortunately, support in sufficient strength was not promptly sent forward, and General Windham went back in search of them. This ill-advised step left the combatants, already hardly pressed, without the guidance of any leader of rank, and the unequal contest was not long maintained. Had the French, it is said, turned the Russian guns they had captured in the Malakoff on to the Redan, that work would have been quite untenable, so that its assault—except, perhaps, as a feint—was really unnecessary.

Thus Sebastopol, or its principal part—smoking ruins and an empty shell—fell at last to the allied forces of French and English. Probably the assault upon the Malakoff, if it had not been successful, would not have been renewed; for everybody agreed that if the fortress was not taken before the second winter arrived, it would have been necessary to raise the siege.

CHAPTER XXVI.

Overthrow of the French Empire at Sedan.

AR between France and Germany had been declared on 19th July, 1870; and as early as August 2nd—so swiftly had been accomplished the work of mobilizing the hosts of the Fatherland as the "Watch on the Rhine"—King William of Prussia, now in his seventieth year, took command of the united German armies at Mayence.

These armies were three in number—the First, on the right, consisting of 60,000 men, commanded by General Steinmetz; the Second, in the centre, 194,000 strong, under the "Red Prince" (Frederick Charles); and the Third, on the left, 130,000, led by the Crown Prince of Prussia. An additional 100,000 men, still at the disposal of any of these three hosts, brought up the German field-army to a figure of 484,000.

Altogether, Germany now had under arms no fewer than 1,183,389 men, with 250,373 horses! Many of these, however, had to remain behind in the Fatherland itself to man the fortresses and maintain communication with the front; while others belonged to the category of supplementary troops, or reserves, held ready to supply the gaps made in the fighting field-army of nearly half a million men, as above.

The corresponding field array of the French was considerably inferior in point of numbers (336,500), equipment, organization, and discipline—in all respects, in fact, save that of the chasse-

pot rifle, which was decidedly superior to the German needle-gun. The French, too, had a large number of mitrailleuses, or machine-guns, which ground out the bullets at what they deemed would be a terribly murderous rate. But these instruments of wholesale massacre did not, in the end, come up to the French expectation of them; while, on the other hand, the Prussian field-artillery proved itself to be far superior in all respects to that of the French.

Finally, the Germans had a plan; the French had none. Profound forethought was stamped on everything the Germans did; but, on the other hand, it was stamped on scarcely one single act of their enemies. The Germans had at their head a man of design, while the corresponding director of the French was only a "Man of Destiny."

The first serious battle was fought on the 4th August at Wissemburg, when the Crown Prince fell upon the French and smote them hip and thigh, following up this victory, on the 6th, at Worth, when he again assaulted and tumbled back the overweening hosts of MacMahon in hideous ruin, partly on Strasburg, partly on Chalons. On this same day Steinmetz, on the right, carried the Spicheren Heights with terrific carnage, and all but annihilated Frossard's Corps.

It was now the turn of the "Red Prince," in the centre, to strike in; and this he did on the 16th, with glorious

success, at Mars-la-Tour, when, against fivefold odds, he hung on to Marshai Bazaine's army and thwarted it in its attempt to escape from Metz. Two days later, the 18th, on very nearly the same ground, there was fought the bloodiest battle of all the war, that of Gravelotte-St. Privat-which resulted in the hurling back of Bazaine into Metz, there to be cooped up and beleaguered by Prince Frederick Charles and forced to capitulate within a couple of months.

The Crisis Near.

Moltke's immediate object was now to dispose of MacMahon, who had retired on Chalons—thence either to fall back on Paris, or march by a circuitous route to the relief of Bazaine. Which course he meant to adopt the German leaders did not as yet know, though it was of life-and-death importance that they should find out with the least pos-Meanwhile the Crown sible delay. Prince of Prussia with the Third Army continued his pursuit of MacMahon, as if towards Chalons; and with him cooperated the Crown Prince of Saxony at the head of a Fourth Army (of the Meuse), which had now been created out of such of the "Red Prince's" forces (First and Second Armies) as were not required for the investment of Metz.

For several days the pursuing Germans continued their rapid march to the west, but on the 25th, word reached Moltke, the real directing head of the campaign, that McMahon in hot haste had evacuated the camp at Chalons, and marched to the north-west on Rheims, with the apparent intention of doubling back on Metz. Meanwhile, like a breathless and bewildered hare.

until his intention should become unmistakably plain, the German leaders did no more than give a right half-front direction to the enormous host of about 200,000 men, which, on an irregular frontage of nearly fifty miles, was sweeping forward to the west, Pariswards.

For three more days this altered movement was continued, and then "Right-hand wheel!" again resounded all along the enormous line, there being now executed by the German armies one of the grandest feats of strategical combination that had ever been performed. The German cavalry had already done wonders of scouting, but it was believed that Moltke's knowledge of the altered movements of MacMahon was now mainly derived from Paris telegrams to a London newspaper, which were promptly re-communicated, by way of Berlin, to the German headquarters—a proof of how the revelations of the war-correspondent—whom Lord Woolsey once denounced as the "curse of modern armies"—may sometimes affect the whole course of a campaign.

On the Double Quick.

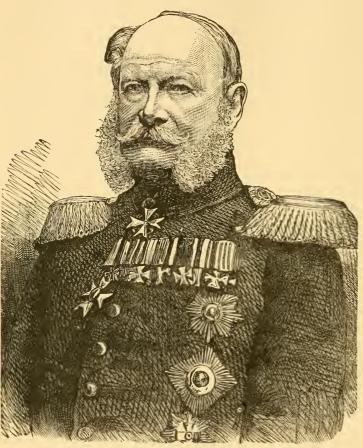
Not long was it now before the heads of the German columns were within striking distance of MacMahon, who was hastening eastward to cross the Meuse in the direction of Metz; but his movement became ever more flurried in proportion to the swiftness wherewith the Germans deployed their armies on a frontage parallel to his flank line of march. Alternately obeying his own military instincts and the political orders from Paris, MacMahon dodged and doubled in the basin of the Meuse

On the 30th of August an action at Beaumont proved to the French the atter hopelessness of their attempting to pursue their Metz-ward march. As

Turenne, who had unrighteously seized Strasburg and the left bank of the Rhine for France, and been the scourge of Germany, it was peculiarly fitting the battle of Mars-la-Tour had com- that it should now become the scene of

> the battle which was to restore Alsace-Lorraine to the Fatherland, and destroy the Continental supremacy of the Gauls.

> Standing the 011 right bank of the Meuse, in a projecting angle between Luxemburg and Belgian territory, the fortressed old town of Sedan is surrounded by meadows, gardens, cultivated fields, ravines, and wet-ditches; while the citadel, or castle, rises on a cliff-like eminence to the southwest of the place. Away in the distance towards the Belgian frontier stretch the Ardennes—that verdant forest of Arden in which Touchstone jested and Orlando



WILLIAM I .- EMPEROR OF GERMANY.

pelled Bazaine to relinquish his plan of reaching Verden and to fight for his life with his back to Metz, so the victory of Beaumont proved to MacMahon that his only resource left was to abandon the attempt to reach the virgin fortress on the Moselle, and concentrate his demoralized and rabble army around the frontier stronghold of Sedan.

As Sedan had been the birthplace of one of the greatest of French marshals, loved, but which was now to become the scene of a great tragedy—of one of the most crushing disasters that ever befell a mighty nation.

In retiring on Sedan, MacMalion had not intended to offer battle there, but simply to give his troops a short rest, of which they stood so much in need, and provide them with food and ammunition. These troops were worn out with their efforts by day and night and

continuous rain; while their apparently aimless marching to and fro had undermined their confidence in their leaders, and a series of defeats had shaken their own self-trust. Thousands of fugitives, crying for bread, crowded round the wagons as they made their way to the little fortress which had thus so suddenly become the goal of a vast army.

Mouse in the Trap.

On the 31st of August, after making all his strategic preparations, and taking a general survey of the situation, Moltke quietly remarked with a chuckle: "The trap is now closed, and the mouse is in it." That night headquarters were at Vendresse, a townlet about fourteen miles to the south of Sedan; and early on the morning of the 1st of September, King William and his brilliant suite of generals, princes, and foreign officers were up and away to the hill-slope of Fresnois, which commands a view of the town and valley of Sedan as a box on the grand tiers of an opera does that of the stage. Bismarck, Moltke, and Roonthe king's mighty men of wisdom and valor—were also in his majesty's suite. "Why," remarked a Prussian soldier on seeing this brilliant assemblage take up its position on the brow of the hill and produce its field-glasses, "why, all this is just the same as at our autumn manœuvres!"

The morning had broken in a thick fog, under cover of which the Germans had marched up to their various positions, some of the columns having moved off at midnight; and by the time King William had taken his stand on the Fresnois height, a little to the east of where his son, the Crown Prince,

had similarly posted himself in order to direct the movements of the Third Army, the hot September sun had raised the curtain of the mist and disclosed the progress which had already been made by the stupendous battle drama.

This had been opened by the Bavarians, under Von der Tann, who, crossing the Meuse on pontoons, advanced to attack the village of Bazeilles, a suburb of Sedan, outside the fortifications on the south-east. The Bavarians had already shelled this suburb on the previous evening so severely that pillars of flame and smoke shot up into the air during the night. In no other battle of the war was such fighting ferocity shown as in this hand-to-hand struggle for Bazeilles. For the Bayarians were met with such stubborn resistance on the part of the French marine infantry posted there, that they were twice compelled to abandon their hold on that place by vehement counter-assaults.

Women in the Fight.

The inhabitants of the village, too—women as well as men—joined in its defence by firing out of the houses and cellars on the Bavarians as they pressed onward, and by perpetrating most revolting barbarities on the wounded Germans left behind when their comrades had repeatedly to retreat. The Bavarians, on their part, were so dreadfully embittered and enraged by these things that they gave no quarter, acting with relentless rigor towards all the inhabitants found with arms in their hands or caught in the act of inflicting cruelties on the wounded.

The struggle for the village became one of mutual annihilation. House by

house and street by street had to be stormed and taken by the Bavarians, and the only way of ejecting the enemy from some of these massively built and strongly garrisoned buildings was by

NAPOLEON III. - EMPEROR OF FRANCE.

employing pioneers to breach the walls in the rear or from the side streets and throw in lighted torches. Notwithstanding all the desperate bravery of the Bavarians, the battle fluctuated for nearly six hours in the streets of Bazeilles, fresh troops, or freshly rallied ones, being constantly thrown by both sides into the seething fight. It was not till about 10 A. M. that the Bavarians had acquired full possession of the village itself—now reduced to mere acaps of ruins; but as the combat died

away in the streets it was continued with equal desperation in the adjacent gardens on the north, where the French made a fresh stand, defending their ground with the most admirable valor.

Bazeilles was certainly the scene of some of the most shocking atrocities which had been perpetrated by European soldiers since the siege and sack of Badajoz by the victorious troops of Wellington, and the storming of Lucknow by the infuriated Highlanders of Sir Colia Campbell. But it must be remembered that in all three cases the blood of the assailants had been roused to almost tiger-heat by barbarous provocation from the other side.

Simultaneously with the san guinary struggle for Bazeilles, the battle had also been developing at other points. Advancing on the right of the Bavarians the Crown Prince of Saxony—afterwards King Albert—pushed forward towards Givonne with intent to complete the environment of the French on this side. In order to facilitate their marching, the Saxon soldiers had

been ordered to lay aside their knapsacks, and by great efforts they succeeded in reaching their appointed section of the ring of investment early in the day, taking the enemy completely by surprise, and hurling them back in confusion both at La Moncelle and Daigny. At the latter place the French, soon after 7 A. M., made two offensive sallies with their renowned Zouaves and dreaded Turcos belonging to the 1st Corps, but were beaten back by a crushing artillery and needle-gun fire.

For some time the scales of battle hung uncertain on this portion of the field, but reinforcements coming up to the Saxons, the latter made an impetuous push across the valley, capturing three guns and three mitrailleuses from the French after half an hour's streetfighting in the village (Daigny), which was now finally wrested from the enemy. Soon after this the Saxon right was rendered secure by the advance of the Prussian guards, under Prince August of Wurtemburg, who had made a wide detour to reach their objective, Givonne.

The French Scattered.

A considerable body of French cavalry and numerous trains were seen by the Guards on the opposite side of the valley. These offered the corps artillery of the Guards an immediate target for its fire; and scarcely had the first shells fallen among the French columns when the entire mass scattered in all directions in the greatest confusion, leaving everywhere traces of a complete panic. The cavalry of the Guard was sent by a detour to the right, to bar the road to Belgium, and also establish touch with the Crown Prince's (Third) army, which had been pushed round on the German left.

At Givonne the Guards, at a great loss, stormed and captured seven guns and three mitrailleuses, whose gunners were all killed or made prisoners. Beaten out of Daigny and Givonne, the French hereabouts fled in a disorderly crowd into the woods, or fell back upon the centre, which they incommoded and discouraged by their precipitate appearance on a part of the field where they were not wanted. Shortly after, the

junction between the Prussian Guards and the Crown Prince was accomplished, and the ring was now complete.

Successes equal to those at Daigny and Givonne were obtained by the Germans in other directions, and the French centre began to recede, though the contest was still prolonged with desperate tenacity, the French fiercely disputing every hill-slope and point of vantage, and inflicting as well as sustaining tremendous losses.

Stubborn Resistance.

Meanwhile the French right had been hotly engaged. A railway bridge which crosses the Meuse near Le Dancourt had been broken down by MacMahon, but in the early morning the Crown Prince had thrown some of his troops across the river on pontoons, and was thus enabled to plant his batteries on the crest of a hill which overlooks Floing and the surrounding country. The French, suddealy attacked in the rear, were more than astonished at the position in which they now found themselves; but fronting up towards their assailants with all their available strength, they maintained a prolonged resistance.

Their musketry fire was poured in with such deadliness and determination, that it was heard even above the deeper notes of the mitrailleuse, now playing with terrible effect on the Germans. General Sheridan said he had never heard so well-sustained and long-continued a small-arm fire.

By noon, however, the Prussian battery on the slope above the broken bridge over the Meuse, above La Vilette, had silenced two French batteries near Floing, and now the enemy were compelled to retire from the position.

About half-past twelve large numbers of retreating French were seen on the hill between Floing and Sedan, their ranks shelled by a Prussian battery in front of St. Menges.

Fierce Assaults.

The Germans now advanced and seized Floing in the valley, holding it against all attempts to dislodge them; but it still remained for them to scale the heights beyond, from the entrenched slopes and vineyards of which they were exposed to a murderous fire. Here the French had all the advantages of position, and the Germans could make but little headway in spite of their repeated efforts, so that at this point the battle came to something like a standstill for nearly an hour and a half, the time being consumed in assaults and counter-assaults.

At last, on receiving reinforcements, which brought up their strength in this portion of the field to seventeen battalions, the Germans once more advanced to the attack, and the French saw that something desperate must be done if their position was to be saved. Hitherto the French cavalry had done little or nothing, but now was their chance. Emerging from the Bois de la Garenne at the head of the 4th Reserve Cavalry Division, consisting of four Scots-Greylooking regiments of Chasseurs d'Afrique and two regiments of Lancers, General Marguerite prepared to charge down upon the Germans. But he himself was severely wounded before his imposing mass of picturesque horsemen had fairly got in motion, and then the command devolved on General Gallifet. one of the brayest and most brilliant cavalry officers in all France—in all Furope.

Placing himself at the head of his magnificent array of horsemen, Gallifet now launched them against the seventeen battalions of the Germans. Thundering down the slope, the shining squadrous broke through the line of skirmishers scattering them like chaff. But then, in the further pursuit of their stormful career, they were received by the deployed battalions in front and flank with such a murderous fire of musketry, supplemented by hurricanes of grape-shot from the batteries, as made them reel and roll to the ground -man and horse-in struggling, convulsive heaps. Nowhere throughout the war was the terrible pageantry of battle so picturesquely displayed as now on these sacrificial slopes of Sedan, when the finest and fairest chivalry of France was broken and shivered by bullet and bayonet as a furious wave is shattered into spray by an opposing rock.

A Field of Slaughter.

Supported by Bonnemain's division of four Cuirassier regiments, "these attacks," wrote Moltke, "were repeated by the Freuch again and again, and the murderous turmoil lasted for half an hour, with steadily diminishing success for the French. The infantry volleys fired at short range strewed the whole field with dead and wounded. Many fell into the quarries or over the steep precipices, a few may have escaped by swimming the Meuse, and scarcely more than half of these brave troops were left to return to the protection of the fortress."

The scene was well described by an eye-witness, Mr. Archibald Forbes:—
"At a gallop through the ragged intervals in the confused masses of the in-

fantry came dashing the Chasseurs d'Afrique. The squadrous halted, fronted, and then wheeled into line, at a pace and with a regularity which would have done them credit in the Champ de Mars, and did them double credit executed as was the evolution under a warm fire. That fire, as one could tell by the dying away of the smoke-jets, ceased all of a sudden, as if the trumpets which rang out the · Charge!' for the Chasseurs had sounded also the 'Cease firing!' for the German artillery and infantry. Not a needlegun gave fire as the splendid horsemen crashed down the gentle slope with the velocity of an avalanche.

Grand Cavalry Charge.

"I have seen not a few cavatry charges, but I never saw a finer one, whether from a spectator's or an adjutant's point of view, than this one of the Chasseurs d'Afrique. It was destined to a sudden arrestment, and that without the ceremony of the trumpets sounding the 'Halt.' The horsemen and the footmen might have seen the color of each others' moustaches (to use Havelock's favorite phrase), when along the line of the latter there flashed out a sudden, simultaneous streak of fire.

"Like thunder-claps sounding over the din of a hurricane, rose the measured crash of the battery guns, and the cloud of white smoke drifted away towards the Chasseurs, enveloping them for the moment from one's sight. When it blew away, there was visible a line of bright uniforms and grey horses struggling prostrate among the potato drills, or lying still in death. Only a handful of all the gallant show of five minutes before were galloping back-

ward up the slope, leaving tokens at intervals of their progress as they retreated. So thorough a destruction by what may be called a single volley probably the oldest soldier now alive never witnessed."

The French Hurled Back.

The French had played their last card. They had endeavored to give the tide of battle a favorable turn by sacrificing their cavalry, but in vain. The Germans now stormed and captured the heights of Floing and Cazal, and from this time the battle became little more than a mere farce. The French were thoroughly disheartened, and rapidly becoming an undisciplined rabble. Hundreds and thousands of them allowed themselves to be taken prisoners; ammunition-wagons were exploding in their midst, while the German artillery were ever contracting their murderous fire, and walls of bayonets closed every issue. The fugitive troopers, rushing about in search of cover, increased the frightful confusion which began to prevail throughout the circumscribed space in which the French army had been cooped up.

Still, from the German point of view, a decisive blow was imperative, so that the results of the mighty battle might be secured without a doubt. With this in view, the Prussian Guards and the Saxons from Givonne quarter were launched against the Bois de la Garenne, which had become the last refuge of the battered and broken French; and these were soon driven back from every point, with the loss of many guns and prisoners—back on the fortress of Sedan in wild turmoil and disorganized flight.

It is to the inside of this fortress that the scene must now change, in order that we may pick up and follow what may be called the personal thread of the great battle-drama, of which we have but given the leading episodes. For it is only at this point that the battle-drama began to enter its most interesting, because most surprising phase.

Brave Marshal Wounded.

Marshal MacMahon, the French commander-in-chief, had been in the saddle as early as 5 A. M. When riding along the high ground above La Moncelle he was severely wounded in the thigh by the fragment of a shell, and then he nominated Ducrot his successor in command. By 8 o'clock the latter was exercising this command, in virtue of which he had ordered a retreat westward to Mezieres; but presently he was superseded by General de Wimpffen, who had but just arrived from Algeria, and who hastened to countermand the retreat on Mezieres in favor of an attempt to break out in the opposite direction towards Carignan. This chaos of commanders and confusion of plans proved fatal to the distracted French, who now began to see that there was no hope for them.

When riding out in the direction of the hardest fighting, Napoleon had metthe wounded Marshal being brought in on a stretcher. The unfortunate Emperor mooned about the field for hours under fire, but he had no influence whatever on the conduct of the battle. He had already almost ceased to be Emperor in the eyes of his generals, and even of his soldiers. De Wimpffen sent a letter begging his imperial master "to place himself in the

midst of his troops, who could be relied on to force a passage through the German lines;" but to this exhortation his Majesty vouchsafed no reply.

White Flag Goes Up.

Eventually he returned into the town and, already showing the white feather, gave orders for the hoisting of the white flag. Up flew this white flag as a request to the Germans to suspend their infernal fire; but this signal of distress had not long fluttered aloft when it was indignantly cut down by General Faure, chief-of-staff to the wounded MacMahon, acting on his own responsibility alone. For some time longer the useless slaughter went on, and then Napoleon made another attempt to sue for mercy.

"Why does this useless struggle go on?" he said to Lebrun, who entered the presence of his Majesty shortly before 3 P. M. "An hour ago or more I bade the white flag be displayed in order to sue for an armistice"

Lebrun explained that, in addition to the flying of the white flag, there were other formalities to be observed in such a case—the signing of a letter by the commander-in-chief, and the sending of it by an officer accompanied by a trumpeter and a flag of truce.

These things being seen to, Lebrun now repaired to where Wimpffen was rallying some troops for an assault on the Germans in Balan, near Bazeilles; and on seeing Lebrun approach with all his paraphernalia for a parley, the angry commander-in-chief shouted: "No capitulation! Drop that rag! I mean to fight on!" and forthwith he started for Balan, carrying Lebrun with him into the fray.

Meanwhile Ducrot, who had been fighting hard about the Bois de la Garenne, in the desperate attempt to retard the contraction of the German circle of fire and steel, resolved about this time

to pass through Sedan and join in Wimpffen's proposed attempt to cut a way out towards Carignan. What he saw in the interior of the town may be described almost in his own words.

The streets, the open places, the gates were blocked up by wagons, guns, and the luggage and debris of a routed army. Bands of soldiers without arms, without packs, were rushing about, throwing themselves into the churches or breaking into private houses. Many unfortunate men were trampled under foot. The few soldiers who still preserved a remnant of energy seemed to be expending it in accusations and curses. "We have been be-

trayed," they cried; "we have been sold by traitors and cowards."

Nothing could be done with such men, and Ducrot, desisting from his intention to join De Wimpffen, hastened to seek out the Emperor. The air was all on fire; shells fell on roofs, and struck

masses of masonry, which crushed down on the pavements. "I cannot understand," said the Emperor, "why the enemy continues his fire. I have ordered the white flag to be hoisted. I



MARSHAL MACMAHON—FRENCH COMMANDER AT THE
BATTLE OF SEDAN.

hope to obtain an interview with the King of Prussia, and may succeed in getting advantageous terms for the army."

While the Emperor and Ducrot were thus conversing, the German cannonade increased in deadly violence. Fires burst out; women, children and wounded were destroyed, and the air was filled with shrieks, curses and groans.

"It is absolutely necessary to stop this firing," at last exclaimed the Emperor, in a state of pallid perturbation. "Here, write this: 'The flag of truce having been displayed, negotiations are about to be opened with the enemy. The firing must cease all along the line.' Now sign it!"

"Oh, no, sire," replied Ducrot; "I cannot sign. By what right could I do so? General Wimpffen is in chief command."

"Yes," rejoined the Emperor; but I know not where General Wimpffen is to be found. Someone must sign!"

"Let his chief-of-staff do so," suggested Ducrot; "or General Douay."

"Yes," said the Emperor; "let the chief-of-staff sign the order."

Disgraceful Altercation.

But what became of this order is not exactly known. All that is known is, that the brave Wimpffen scorned even to open the Emperor's letter, calling upon his Majesty instead to come and help in cutting a way out; that the Emperor did not respond to this appeal; that Wimpffen, failing in his gallant attempt on Balan for want of proper support, then retired to Sedan, and indignantly sent in his resignation to the Emperor; that then, in the presence of his Majesty, there was a scene of violent altercation between Wimpffen and Ducrot, in the course of which it was believed that blows were actually exchanged; and that finally Napoleon brought Wimpffen to understand that, having comduty not to desert his post in circumstances so critical.

Furious Artillery Fire.

Let the scene now again shift to the hill-top of Fresnois, where King William and his suite were viewing, as from the dress-circle of a theatre, the course of the awful battle-drama in the town and valley below. The first white flag run up by order of Napoleon had not been noticed by the Germans, and thinking thus that the French meant to fight it out to the bitter end, the King, between 4 and 5 P. M., ordered the whole available artillery to concentrate a crushing fire on Sedan, crowded as it was with fugitives and troops, so as to bring the enemy to their senses as soon as possible, no matter by what amount of carnage, while at the same time, under cover of this cannonade, a Bavarian force prepared to storm the Torcy Gate.

The batteries opened fire with fearful effect, and in a short time Sedan seemed to be in flames. This was the cannonade which had burst out during the Emperor's conversation with Ducrot, making his Majesty once more give orders for the hoisting of the white flag; and no sooner was it at length seen flying from the citadel than the German fire at once ceased, when the King despatched Colonel Bronsart von Schellendorff, of his staff, to ride down into Sedan under a flag of truce and summon the garrison to surrender.

Penetrating into the town, and asking for the commander-in-chief, this officer, to his utter astonishment, was led into the presence of Napoleon!

pffen to understand that, having com- For the Germans had not yet the manded during the battle it was his faintest idea that the Emperor was in

Sedan. Just as Colonel Bronsart was starting off, General Sheridan, of the United States Army, who was attached to the royal headquarters, remarked to Bismarck that Napoleon himself would

likely be one of the prizes. "Oh, no," replied the Iron Chancellor, "the old fox is too cunning to be caught in such a trap; he has doubtless slipped off to Paris."

What, then, was the surprise of all when Colonel Brousart galloped back to the hill-slope of Fresnois with the astounding news that the Emperor himself was in the fortress, and would himself at once communicate direct with the King!

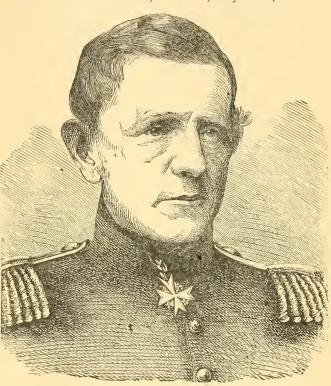
This Colonel Bronsart was a man of French extraction, being descended (like so many in Prussia) from one of those Huguenot families who had been driven into exile by the cruel despotism of Louis

XIV. And now—strange Nemesis of history—to the lineal representative of a victim of this tyranny was given the satisfaction of demanding, on behalf of his royal Prussian master, the sword of the historical successor in French despotism to Louis XIV.

The effect on the field of battle, as the fact of a surrender became obvious to the troops, was most extraordinary. The opening of one of the gates of Sedan to permit the exit of the officer bearing the flag of truce gave the first impression of an approaching capitula- with his momentous message, murmur.

tion. This gradually gained strength until it acquired all the force of actual knowledge, and ringing cheers ran along the whole German line of battle.

Shakoes, helmets, bayonets, and sa-



COUNT VON MOLTKE-COMMANDER OF THE GER-MAN ARMY AT SEDAN.

bres were raised high in the air, and the vast army swayed to and fro in the excitement of an unequalled triumph. Even the dying shared in the general enthusiasm. One huge Prussian, who had been lying with his hand to his side in mortal agony, suddenly rose to his feet as he comprehended the meaning of the cries, uttered a loud "Hurrah!" waved his hands on high, and then, as the blood rushed from his wound, fell dead across a Frenchman.

On Bronsart returning to the King

ed cries of "Der Kaiser ist da!" (the Kaiser is there) ran through the brilliant gathering, and then there was a moment of dumbfounded silence.

"This is, indeed, a great success," then said the King to his retinue. "And I thank thee" (turning to the Crown Prince) "that thou hast helped to achieve it."

A Sealed Letter.

With that the King gave his hand to his son, who kissed it; then to Moltke, who kissed it also. Lastly, he gave his hand to the Chancellor, and talked with him for some time alone. Presently several other horsemen—some escorting-troopers—were seen ascending the hill. The chief of them was General Reille, the bearer of Napoleon's flag of truce.

Dismounting about ten paces from the King, Reille, who wore no sword and carried a cane in his hand, approached his Majesty with most humble reverence, and presented him with a sealed letter.

All stepped back from the King, who, after saying, "But I demand, as the first condition, that the army lay down their arms," broke the seal and read:

"Monsieur, My Brother,—Not having been able to die in the midst of my troops, it only remains for me to place my sword in the hands of your Majesty. I am your Majesty's good brother.

"NAPOLEON."

"SEDAN, 1st September."

Certainly it seemed that the Emperor night have tried very much harder than he had done to die in the midst of his troops, but his own heart was his best judge in this respect

On reading this imperial letter, the King, as well he might, was deeply moved. His first impulse, as was his pious wont, was to offer thanks to God; and then, turning to the silent and gazing group behind him, he told them the contents of the imperial captive's letter.

The Crown Prince with Moltke and others talked a little with General Reille, whilst the King conferred with his Chancellor, who then commissioned Count Hartzfeldt to draft an answer to the Emperor's missive.

William to Napoleon.

In a few minutes it was ready, and his majesty wrote it out sitting on a rush-bottom chair, while another was held up to him by way of desk:

"Monsieur, My Brother,—Whilst regretting the circumstances in which we meet, I accept your Majesty's sword, and beg you to appoint one of your officers, provided with full powers, to treat for the capitulation of the army which has fought so bravely under your command. On my part I have nominated General Von Moltke for this purpose. I am your Majesty's good brother, "WILLIAM."

"Before SEDAN, 1st September, 1870."

While the King was writing this answer, Bismarck held a conversation with General Reille, who represented to the Chancellor that hard conditions ought not to be imposed on an army which had fought so well.

"I shrugged my shoulders," said Bismarck.

Reille rejoined that, before accepting such conditions, they would blow themselves up skyhigh with the fortress.

"Do it, if you like; faites sauter,"

replied Bismarck; and the King's reply was now handed to the envoy of the captured Emperor.

The twilight was beginning to deepen when General Reille rode back to Sedan, but his way was lighted by the lurid gleam of the conflagrations in and

around the fortxess which crimsoned the evening sky. And swift as the upshooting flames of shell-struck magazine, flew all around the circling German lines the great and glorious tidings that the Emperor with his army were prisoners of war!

In marching and in fighting, the troops had performed prodigies of exertion and of valor, but their fatigues were for the time forgotten in the fierce intoxication of victory; and when the stars began to twinkle overhead, and the hilltops around Sedan to glow with flickering watch-fires, up then arose from more than a hundred thousand grateful German throats, loud and clear through the ethereal summer night, the deeply pious strains of "Now thank we all our God;" and then the curtain of darkness fell on one of the most tragic and momentous spectacles ever

and wonders.

"Before going to sleep," wrote Mr. Archibald Forbes—the prince, if not the father, of war-correspondents—"I took a walk round the half-obliterated ramparts which surround the once fortified town of Donchery. The scene was very fine. The whole horizon was lurid with the reflection of fire. All along the valley of the Meuse, on either side, were

the bivouacs of the German host. Two

witnessed by this age of dramatic change

hundred thousand men lay here around their King. On the horizon glowed the flames of the burning villages, the flicker occasionally reflecting itself on a link of the placid Meuse. Over all the quiet moon waded through a sky cumbered with wind-clouds.



MARSHAL BAZAINE—DIVISION COMMANDER OF THE FRENCH ARMY.

"What were the Germans doing on this their night of triumph? Celebrating their victory by wassail and riot? No. There arose from every camp one unanimous chorus of song, but not the song of ribaldry. Verily they are a great race these Germans—a masterful, fighting, praying people; surely in many respects not unlike the men whom Cromwell led. The chant that filled the night air was Luther's hymn, the glorious—

^{&#}x27;Nun danket alle Gott.'

the 'Old Hundredth' of Germany. To hear this great martial orchestra singing this noble hymn under such circumstances was alone worth a journey to Sedan, with all its vicissitudes and difficulties."

Of the 200,000 men whom the Germans had marched up towards Sedan, only about 120,000 had taken actual part in the battle; and of these their glorious victory had entailed a loss of 460 officers and 8,500 men in killed and wounded. The French, on the other hand, had to lament the terrible loss of 17,000 killed and wounded, and 24,000 prisoners taken on the field (including 3,000 who had fled over into Belgium and been disarmed). On the part of the Germans, the Bavarians and the men of Posen had been the heaviest sufferers.

Loud Huzzas Greet the King.

On the night of the battle King William returned to Vendresse, "being greeted," as he himself wrote, "on the road by the loud hurrals of the advancing troops, who were singing the national hymn," and extemporizing illuminations in honor of their stupendous victory; while Bismarck, with Moltke, Blumenthal, and several other staffofficers, remained behind at the village of Donchery—a mile or two from Sedan—to treat for the capitulation of the French army.

For this purpose an armistice had been concluded till four o'clock next morning. The chief French negotiators were Generals de Wimpffen and Castelnau—the former for the army, the latter for the Emperor.

Both pleaded very hard for a mitigation of Moltke's brief but comprehensive condition—unconditional surrender of Sedan and all within it. But the German strategist was as hard and unbending as adamant; and when De Wimpffen, with the burning shame of a patriot and the grief of a brave soldier convulsing his heart, talked of resuming the conflict rather than submit to such humiliating terms, Moltke merely pointed to the 500 guns that were now encircling Sedan on its ring of heights, and at the same time invited Wimpffen to send one of his officers to make a thorough inspection of the German position, so as to convince himself of the utter hopelessness of renewed resistance.

Terms are Final.

The negotiations lasted for several hours, and it was past midnight when the broken-hearted De Wimpffen and his colleagues returned to Sedan, having meanwhile achieved no other result than the prolongation of the armistice from 4 to 9 A. M. on the 2nd September, at which hour to the minute, said Moltke, the fortress would become the target of half a thousand guns unless his terms were accepted.

On returning to Sedan about I A. M., De Wimpffen at once went to the Emperor to make a report on the sad state of affairs, and beg his Majesty to exert his personal influence to obtain more favorable terms for the army. For this purpose Napoleon readily undertook to go to the German headquarters at 5 A. M.

Soon after he had driven out of the fortress, Wimpffen called a council of war, consisting of all the commanding generals, and put the question whether further resistance was possible. It was answered in the despairing negative by all the thirty-two generals present, save

only two, Pelle and Carre de Bellemare; while even these two in the end acquiesced in the absolute necessity of accepting Moltke's terms on its being shown them that another attempt to break through the investing lines would only lead to useless slaughter. For in the course of the night the Germans had further tightened their iron grip on the fortress, and thickened the girdle of their guns. No; there was clearly nothing left for the poor, demoralized French but to yield to the inevitable, and their only chance lay in the hope that the Emperor himself would be able to procure some mollification of their terrible fate.

Notable Meeting.

But the hope proved a vain one. Driving forth with several high officers from the fortress about 5 A. M., the Emperor, who was wearing white kid gloves and smoking his everlasting cigarette, sent on General Reille to Donchery in search of Bismarck; and the latter, "unwashed and unbreakfasted," was soon galloping towards Sedan to learn the wishes of his fallen Majesty.

He had not ridden far when he encountered the Emperor, sitting in an open carriage, apparently a hired one, in which were also three officers of high rank, and as many on horseback. Bismarck had his revolver in his belt, and on the Emperor catching sight of this he gave a start; but the Chancellor, saluting and dismounting, approached the Emperor with as much courtesy as if he had been at the Tuileries, and begged to know his Majesty's commands.

see the King, but Bismarck explained that this was impossible, his Majesty being quartered fourteen miles away. Had not the King, then, appointed any place for him, the Emperor, to go to?

In a Poor Cottage.

Bismarck knew not, but meanwhile his own quarters were at his Majesty's disposal. The Emperor accepted the offer, and began to drive slowly towards Donchery, but, hesitating on account of the possible crowd, stopped at a solitary cottage, that of a poor weaver, a few hundred paces from the Meuse bridge, and asked if he could remain there.

"I requested my cousin," said Bismarck, "to inspect the house, and he reported that, though free from wounded, it was mean and dirty. Follow, said Napoleon, and with him I ascended a rickety, narrow staircase. In a small, one-windowed room, with a deal table and two rush-bottomed chairs. we sat alone for about an hour—a great contrast to our last meeting in the Tuileries in 1867," the year of the Paris Exhibition. "Our conversation was a difficult thing, wanting, as I did, to avoid touching on topics which could not but painfully affect the man whom God's mighty hand had cast down."

Whenever Napoleon led this conversation, as he was forever doing, to the terribly hard terms of the capitulation, Bismarck met him with the assurance that this was a purely military question, and quite beyond his province. Moltke was the man to speak to about such things.

In the meantime efforts had been made to find better accommodation for the Napoleon replied that he wanted to Emperor, and this was at last discovered in the Chateau Bellevue, a little further up the Meuse. Leaving Napoleon in the weaver's cottage, Bismarck hurried back to his quarters on the market-place at Donchery to array himself in his full uniform, and then, as he said, "I conducted his Majesty to Bellevue, with a squadron of Cuirassiers as escort."

King William Absent.

At the conference which now began, the Emperor wished to have the King present, from whom he expected softness and magnanimity; but his Majesty was told that his wish in this respect could not possibly be gratified until after the capitulation had been signed.

Oh! if he could but see and plead with the King—was the anguished Emperor's constant thought; but the King took very good care, or his counsellors for him, that he should not expose himself to any personal appeal for pity until the German army had safely garnered all 's splendid harvest of victory.

Meanwhile De Wimpffen had come out of Sedan with the despairing decision of the council of war, and the determination to accept Moltke's inexorable terms. But even Moltke, the least sentimental and emotional of men could not help feeling a genuine throb of pity for the very hard fate of De Wimpffen—a man of German origin, as his name implied—on whom it thus fell to sign away the existence of an army, of which he had not been four-and-twenty hours in supreme command.

After his interview with Napoleon, Bismarck rode to Chehery (on the road to Vendresse), in the hope of meeting the King and informing him how things stood. On the way he was met by Moltke, who had the text of the capitulation as approved by his Majesty; and on their return to Bellevue it was signed without opposition.

By this unparalleled capitulation 83,-000 men were surrendered as prisoners of war in addition to the fortiess of Sedan with its 138 pieces of artillery, 420 field-guns, including 70 mitrailleuses, 6,000 horses fit for service, 66,ooo stand of arms, 1,000 baggage and other wagons, an enormous quantity of military stores, and three standards. Among the prisoners yielded up were the Emperor and one of his field marshals (MacMahon), 40 generals, and 2,825 various other officers, all of whom, by the special mercy of King William, were offered release on parole, though only 500 of them took advantage of this condition, the others being sent to Germany. By the catastrophe of Sedan the French had lost-in killed, wounded and prisoners—no fewer than 124,000 men at one fell swoop!

Full Surrender.

With the capitulation sealed and signed, Bismarck and Moltke now hastened back to the King, whom they found on the heights above Donchery about noon. His Majesty ordered the important document to be read aloud to his numerous and brilliant suite, which included several German princes.

Now that an appeal had been taken out of the Emperor's power, the King, accompanied by the Crown Prince, rode down to the chateau of Bellevue to meet the fallen monarch. "At one o'clock," wrote his Majesty to Queen Augusta, "I and Fritz set out, accompanied by an escort of cavalry belonging to the staff. I dismounted at the

chateau, and the Emperor came out to meet me. The visit lasted for a quarter of an hour. We were both deeply moved. I cannot describe what I felt at the interview, having seen Napoleon only three years ago at the height of his power."

And now, while the crushed and broken-hearted Emperor was left to spend his last day on the soil of France prior to his departure or the place of his detention at Wil elmshohe, near Cassel (once, strange to say, the residence of his uncle, King Jerome of Westpha a), King William, accompanied by Moltke, Roon, Bismarck, and the rest of his paladins, started on a ride through all the positions occupied by the German armies round Sedan. For five long hours, over hill and dale, from battery

to battalion, and from corps to corps, through all the various tribes of the Fatherland in arms, rode the brilliant cavalcade, greeted with triumphant music and frantic cheering wherever it went. "I cannot describe," wrote the King, "the reception given me by the troops, nor my meeting with the Guards, who have been decimated. I was deeply affected by so many proofs of love and devotion."

No wonder the Germans very nearly went mad with joy. For no victory had ever been like this crowning masterpiece of Moltke's genius—so colossal, so complete, so momentous in its political results, which converted the French Empire into a Republic and the Germanic Confederation into an Empire.

CHAPTER XXVII.

American Victories in the War with Spain.

between the United States and
Spain in 1898, Admiral
Dewey was in command of
our Asiatic squadron, which at this
time was lying in the harbor of Hong
Kong. Colonel Roosevelt, of Rough
Rider fame, being then Assistant Secretary of the Navy, gave orders from
Washington to Admiral Dewey to proceed to Manila and capture or destroy
the Spanish fleet which was known
to be in those waters.

The sailing of the American fleet from Hong Kong on April 27 was promptly cabled to Manila. Many of the better class of residents at once hurried aboard merchant vessels with their valuables and fled. Those left behind took no courage from the confident boastings of the Spanish army and naval officers, but gave way to panic from fear of what would happen when the native insurgents made an attack on the town. It was known to the Spanish authorities that the American fleet would be almost certain to arrive on the evening of Saturday, April 30th.

The Spanish fleet, which at first put to sea to meet and destroy the "cowardly Yankees," was recalled Saturday afternoon and lined up at Cavite, where the arsenals, dry-docks and naval warships were defended by a long line of earthworks. These works had been greatly strengthened, notably by the addition of several big modern guns.

They were regarded as very formidable by old-fashioned Spanish military engineers, as were also the fort on Corregidor Island, the battery on Cabilla Island, and the works on the mainland points to the north and the south. These islands were all in readiness, and a chain of mines which guarded both channels was prepared to blow up each American ship as it passed.

Saturday night fell with the Spaniards on land and water quite **chee**rful over the coming engagement. A short time after midnight, the darkness being intense, one of the guns in Corregidor suddenly boomed out, and all the other guns about the entrance to the bay took up the cry, and the anxious people in Manila poured into the streets. They thought the battle had begun. In reality the American fleet was already past the entrance and was on its way up the opposite side of the bay.

It was a night of terror in Manila. The women and children fled to the churches, and men rushed to and fro in the streets. Dismay seized upon the Spanish soldiers. They had not believed that the Americans could ever get past the entrance to the batteries and past the mines. Long before dawn the panic became a frenzy because of reports that came from the interior of the island that the natives were massing for a descent upon the city to pillage and massacre. When day broke the tens of thousands watching on all sides of the vast and beautiful harbor

saw the enemy in line of battle about ten miles out, directly in front of Manila. There were nine vessels in all.

The Olympia, 5800 tons, a swift commerce destroyer, carrying four terrible 8-inch guns and ten deadly 5-inch quick-firers. This was Dewey's flagship.

The Baltimore, scarcely less formidable than the Olympia, with four eightinch guns and six six-inch rapid-firers.

The Boston, smaller than the Olympia and Baltimore, but still a real and powerful floating fort, with her two eight-inch guns and her six six-inch rapidfirers.

The Raleigh, similar to the Boston, with one sixinch and ten five-inch guns.

The Concord, with six six-inch guns.

The gunboat Petrel, with five six-inch guns.

To the rear of these the transport ships, with coal, ammunition and accommodations for wounded.

With a bright American flag floating gayly over each ship, the decks and all visible appointments neat and trim, the fleet seemed to be out for a holiday rather than awaiting an opening for the only real demonstration of an ironclad fleet in action that the world has had. The Spaniards could hardly believe their own eyes. That this formidable apparition was in the very centre of their harbor, almost within firing distance of the capital city of their last Eastern possessions seemed impossible.

They had not long to watch and speculate. The sun was hardly clear of the horizon before the American fleet began to steam in slow and stately fashion straight toward the city, near which were anchored three men-of-war from three different nations, French,



ADMIRAL GEORGE DEWEY-HERO OF MANILA.

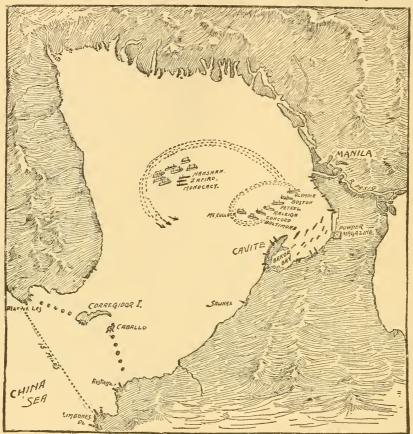
German and English. The decks and rigging of each of these ships were thronged with eager officers and sailors, discipline seeming to have been forgotten in an intense desire to see what the Yankees would do—these Yankees who in three-quarters of a century have never sent a hostile fleet into any port of a European Power.

On came the American fleet until it was within about three miles of Manila, and then a Spanish gun on the battery at the end of the Mole spoke; but the

shot fell short. Then from the Spanish fleet, steaming slowly up from Cavite, came several shots at the American fleet. The two duelists were now face to face.

The smaller cruisers Velasco, Don Juan de Austria, and Don Antonio de Ulloa, besides ten gunboats.

Then there were the batteries on shore all along the low peninsula.



MANILA HARBOR-SCENE OF THE GREAT BATTLE.

To expert eyes the Spanish fleet seemed far inferior, yet to the people watching, and, apparently, to the Spanish officers and sailors, the difference did not seem great. The Spanish ships were of older patterns, rather than smaller, and were far more numerous. There were:

The Reina Cristina, of 3090 tons, with six six-inch and two three-inch guns.

The Castilla, with four six-inch guns.

To get the full effect of all of these guns the Spaniards formed so that the Americans would have to face not only all the guns afloat, but also all the guns on shore at Cavite, while from the rear the strong batteries of Manila could, perhaps, send aiding shots. When the American manœuverings brought their ships within range, at about 6.45, the real duel began. The Spanish fleet stood ready, flanked by the Cavite batteries on the south.

The American fleet began to steam languidly to and fro. Suddenly there were one or two sharp cracks, and then a succession of deafening roars, and then one long, reverberating roar, that boomed and bellowed from shore to

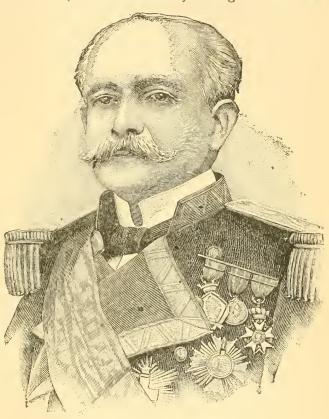
shore. A luge cloud of smoke lay close upon the waters, and around it was a penumbra of thick haze.

Through this the American ships could be seen moving, now slowly, now more rapidly, flames shooting from their sides, and answering flames leaping from the Spanish ships and land batteries, while now and then from the direction of Manila came hollow rumbles as the big guns there were discharged, more from eagerness to take part than from the hope of lending effective aid.

It was impossible to see from shore the effect of many of the shots, but from the fact that the American ships were alternately advancing and retreating in the course of their manœuverings the Spaniards on shore got the impression

that the Yankees were being beaten. When the ships were again seen, the Reina Cristina was wrapped in flames. On her decks sailors, Spaniards and natives, were rushing frantically about. The Isle De Cuba came near, and part of the Reina Cristina's crew—perhaps all that were still alive—and the Spanish Admiral went aboard her, but hardly were they aboard when she, too, burst into flames.

Confusion now reigned throughout the Spanish fleet. On every vessel the decks were slippery with blood and the air filled with the shrieks and groans of the Spaniards. The native sailors rushed about in a frenzy of rage rather than



ADMIRAL MONTOJO, COMMANDER OF SPANISH FLEET AT MANILA.

terror. The Americans were seemingly calm and cool, and still in good order they pressed their advantage. In fact, they pushed on too closely, for now the fire from the Cavite batteries became effective.

At this juncture the Don Juan de Austria became a centre of interest. She had been in the very front of battle and received, perhaps, more of the American shots than any other ship.

Admiral Montojo, on the burning Isla de Cuba, threw up his arms with a gesture of despair as a heavy roar came from the Don Juan de Austria and part of her deck flew up in the air, taking with it scores of dead, dying and mangled. A shot had penetrated one of her magazines. She was ruined and sinking, but her crew refused to leave her. Weeping, cursing, praying and firing madly and blindly they went down with her, and as the Don Juan de Austria went down the Castilla burst into flames.

Great American Victory.

The remainder of the Spanish fleet now turned and fled down the long, narrow inlet behind Cavite. Several of the gun-boats were run ashore, others fled up a small creek and were grounded there. The guns of Cavite kept on thundering, and the Americans, pressing their advantage no further, drew off. As they steamed away toward their waiting transports the Spaniards went wild with joy.

They thought that in spite of outward appearances the American fleet was crippled, and that as it would be unable to escape from the harbor it would fall into their hands. This was telegraphed up to Manila, and soon to Madrid, where it filled the Ministry with momentary delight; but before the Ministers at Madrid had read the false news, the American fleet, with decks again cleared, and with fresh supplies of ammunition, was steaming back toward Cavite.

This second engagement was short. The last Spanish ship was soon grounded or sunk. The American guns were now trained on Cavite, and one ship after another steamed along pouring in a deadly fire. At 11.30 the batteries at Cavite ceased to answer, and the American fleet with ringing cheers from its exhausted, but triumphant crews steamed jubilantly back to the transport ships. And to the long list of splendid naval victories beginning with the Revolution was added the glorious victory of Manila.

In honor of his distinguished services Commodore Dewey was raised to the rank of Admiral, and Congress passed a series of resolutions thanking him and his men for services rendered their country.

In the following August the city of Manila was captured by our troops under command of General Merritt, aided by Dewey's fleet.

War in Cuba.

During the early part of July such complete victories were gained by the American land and naval forces in Cuba as to end the war with Spain. Our Government at Washington despatched the North Atlantic Squadron under command of Admiral Sampson, and the squadron under command of Admiral Schley, to Santiago on the southern coast of Cuba. Troops to the number of 16,000 were also ordered to Santiago under command of General Shafter.

The American officers showed the utmost energy in preparing for the attack on Santiago; by July 1st everything was in readiness, and General Shafter ordered a forward movement with a view of investing and capturing the town. The advance was made in two divisions, the left storming the works at San Juan. Our forces in this assault were composed of the Rough

Riders, commanded by Colonel Wood, subsequently by Lieutenant-Colonel Roosevelt, and the First, Third, Sixth, Ninth and Tenth dismounted cavalry. Catching the enthusiasm and boldness of the Rough Riders, these men rushed against the San Juan defences with a fury that was irresistible.

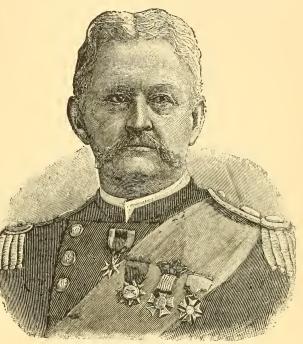
Their fierce assault was met by the Spaniards with a stub-Sornness born of desperation. Hour after hour the troops on both sides fought fiercely. In the early morning the Rough Riders met with a similar, though less costly experience to the one they had at La Quasina just a week before, where in a hot skirmish they lost a number of men. They found themselves a target for a terrific Spanish fire, to resist which for a time was the work of madmen. But the Rough Riders did not flinch. Fighting like demons, they held their ground tenaciously, now pressing forward a few feet, then falling back, under the enemy's fire, to the position they held a few moments before.

The Spaniards were no maten for the Roosevelt fighters, however, and as had been the case at La Quasina, the Western cowboys and Eastern "dandies" hammered the enemy from their path. Straight ahead they advanced, until by noon they were well along toward San Juan, the capture of which was their immediate object.

There was terrible fighting about the heights during the next two hours. While the Rough Riders were playing such havoc in the enemy's lines, the

First, Third, Sixth, Ninth and Tenth cavalry gallantry pressed forward to right and left.

Before the afternoon was far gone these organizations made one grand rush all along the line, carrying the Spaniards off their feet, capturing the San Juan fortifications, and sending



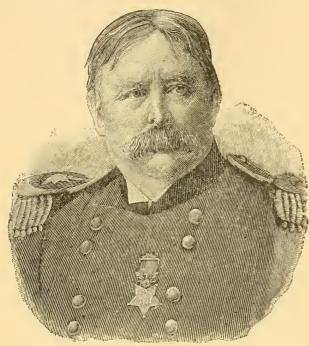
GENERAL WESLEY MERRITT,
COMMANDER OF AMERICAN ARMY AT MANILA.

the enemy in mad haste off toward Santiago. It was but three o'clock when these troops were able to send word to General Shafter that they had taken possession of the position he had given them a day to capture.

In this attack the cavalrymen were supported by the Sixth and Sixteenth infantry, who made a brilliant charge at the crucial moment. The advance was up a long steep slope, through a heavy underbrush. Our men were subjected to a terrific fire from the ene-

my's trenches, and the Rough Riders and the Sixth cavalry suffered severely.

On the right, General Lawton's division, supported by Van Horne's brigade, under command temporarily of Colonel Ludlow, of the Engineers, drove the enemy from in front of Caney, foreing them back into the village. There



GENERAL WILLIAM R. SHAFTER, COMMANDER OF AMERICAN ARMY AT SANTIAGO.

the Spaniards for a time were able to hold their own, but early in the afternoon the American troops stormed the village defences, driving the enemy out and taking possession of the place. Gaining the direct road into Santiago, they established their lines within three-quarters of a mile of the city at sunset.

General Shafter's advance against the city of Santiago was resumed soon after daybreak on the morning of July 2d. The American troops renewed the attack on the Spanish defences with

impetuous enthusiasm. They were not daunted by the heavy losses sustained in the first day's fighting. Inspired by the great advantages they had gained on the preceding day, the American troops were eager to make the final assault on the city itself. Their advance had been an uninterrupted series

of successes, they having forced the Spaniards to retreat from each new position as fast as it had been taken. Admiral Sampson, with his entire fleet, joined in the attack.

The battles before the intrenchments around Santiago resulted in advantage to General Shafter's army. Gradually he approached the city, holding every foot of ground gained. In the fighting of July 2d, the Spanish were forced back into the town, their commanding general was wounded, and the day closed with the certainty that soon our flag would float over Santiago.

The fleet of Admiral Cervera had long been shut up in the harbor, and during the two days' fighting gave effective aid to the Spanish infantry by throw-

ing shells into the ranks of the Americans. On the morning of July 3d, another great naval victory was added to the successes of the American arms, a victory no less complete and memorable than that achieved by Dewey at Manila.

Admiral Cervera's fleet, consisting of the armored cruisers Cristobal Colon, Almirante Oquendo, Infanta Maria Teresa, and Vizcaya, and two torpedo-boat destroyers, the Furor and the Pluton, which had been held in the harbor of Santiago de Cuba for six weeks by the combined squadrons of Rear-Admiral Sampson and Commodore Schley, was sent to the bottom of the Caribbean Sea off the southern coast of Cuba.

The Spanish admiral was made a prisoner of war on the auxiliary gunboat Gloucester, and 1,000 to 1,500 otherwise than fight to the last. They

other Spanish officers and sailors, all who escaped the frightful carnage caused by the shells from the American warships, were also made prisoners of war by the United States navv.

The American victory was complete, and the American vessels were practically untouched, and only one man was killed, though the ships were subjected to the heavy fire of the Spaniards all the time the battle lasted.

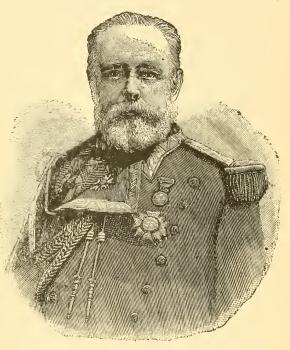
Admiral Cervera made as gallant a dash for liberty and for the preservation of the ships as has ever occurred in the history of naval warfare. In the face of overwhelming odds, with nothing before him but inevitable destruction or surrender if he remained any longer in the trap in which the American fleet held him,

he made a bold dash from the harbor at the time the Americans least expected him to do so, and, fighting every inch of his way, even when his ship was ablaze and sinking, he tried to escape the doom which was written on the muzzle of every American gun trained upon his vessels.

The Americans saw him the moment he left the harbor and commenced their work of destruction immediately. For an hour or two they followed the flying Spaniards to the westward along the

shore line, sending shot after shot into their blazing hulls, tearing great holes in their steel sides and covering their decks with the blood of the killed and wounded.

At no time did the Spaniards show any indication that they intended to do



ADMIRAL CERVERA-COMMANDER OF THE SPANISH FLEET AT SANTIAGO.

displayed no signals to surrender even when their ships commenced to sink and the great clouds of smoke pouring from their sides showed they were on fire. But they turned their heads toward the shore, less than a mile away, and ran them on the beach and rocks, where their destruction was soon completed.

The officers and men on board then escaped to the shore as well as they could with the assistance of boats sent from the American men-of-war, and then threw themselves upon the mercy of their captors, who not only extended to them the gracious hand of American chivalry, but sent them a guard to protect them from the murderous bands of Cuban soldiers hiding in the bushes on the hillside, eager to rush down and attack the unarmed, defeated, but valorous foe.

One after another the Spanish ships became the victims of the awful rain of shells which the American battleships, cruisers and gun-boats poured upon them, and two hours after the first of the fleet had started out of Santiago harbor three cruisers and two torpedoboat destroyers were lying on the shore ten to fifteen miles west of Morro Castle, pounding to pieces, smoke and flame pouring from every part of them and covering the entire coast line with a mist which could be seen for miles.

Heavy explosions of ammunition occurred every few minutes, sending curls of dense white smoke a hundred feet in the air and causing a shower of broken iron and steel to fall in the water on every side. The bluffs on the coast line echoed with the roar of every explosion, and the Spanish vessels sank deeper and deeper into the sand or alse the rocks ground their hulls to

pieces as they rolled or pitched forward or sideways with every wave that washed upon them from the open sea.

Admiral Cervera escaped to the shore in a boat sent by the Gloucester to the assistance of the Infanta Maria Teresa, and as soon as he touched the beach he surrendered himself and his command to Lieutenant Morton and asked to be taken on board the Gloucester, which was the only American vessel near him at the time, with several of his officers, including the captain of the flagship. The Spanish admiral, who was wounded in the arm, was taken to the Gloucester, and was received at her gangway by her commander, Lieutenant Richard Wainwright, who grasped the hand of the gray-bearded admiral and said to him:

"I congratulate you, sir, upon having made as gallant a fight as was ever witnessed on the sea."

The only casualties in the American fleet were one man killed and two wounded on the Brooklyn. A large number of the Spanish wounded were removed to the American ships.

Soon afterward the Spanish army in the Province of Santiago surrendered to General Shafter and our war with Spain was ended.

CHAPTER XXVIII.

War Between the British and the Boers.

OSTILITIES between Great Britain and the Transvaal, or South African Republic, which had been impending for several years, broke out in October, On the oth of this month the British Government received the Boer ultimatum, demanding that points in dispute be referred to arbitration; that all British troops on the border of the Transvaal be instantly withdrawn; that reinforcements sent to South Africa since June 1st be removed; that no more troops be landed in South Africa, and that Great Britain answer before 5 o'clock P. M., October 11th. On the same date the Gordon Highlanders and troops from India were ordered to Ladysmith, a town in Natal.

Great Britain, on the 10th, replied that conditions demanded by the Transvaal were such as could not be discussed. The British agent was instructed to apply for his passport, which meant that war was an assured fact, and that communication between the two governments was now at an end.

The time for acceptance of the ultimatum expired at 5 o'clock P. M., October 11th. Conyngham Greene, the British agent at Pretoria, paid his farewell visits to President Kruger and the Boer officials. General Prinsloo was appointed commander-in-chief of the Orange Free State forces; headquarters at Albertina. The Boers occupied

Laing's Nek and the British hurried troops to the western border.

The Orange Free State joined the Transvaal in war against Great Britain, and hurried troops forward to co-operate with the Boer army under command of General Joubert. General Cronje commanded the Boer forces on the western border, and laid siege to Kimberley, the "Diamond City," and also to Mafeking, another important town lying north of Kimberley. It will suffice for our present purpose to furnish here a chronicle of the important events of the struggle, which was desperate and bloody, both sides exhibiting the most consummate strategy and the greatest heroism.

At Nicholson's Nek about 800 British officers and men and two-thirds of a mountain battery were captured, and about 650 prisoners and two guns fell into the hands of the Boers at Stormberg. Eleven guns were also taken by the Boers at Colenso.

General Buller suffered a severe repulse at Colenso on December 15, but his campaign met with its greatest disaster late in January. A flanking movement, under the immediate command of General Warren, failed signally, and a general withdrawal of the British forces to the south side of the Tugel-River was the immediate result.

Mafeking was invested on October 14, and after that date Colonel Baden-Powell, with 1.600 irregulars, kept at

435

bay a Boer force with a varying strength of from 2,000 to 5,000 men.

Lord Methuen, commanding the British forces on the western border, fought four battles and advanced to within twenty-five miles of beleaguered Kimberley. Belmont, Gras Pan and



GENERAL LORD KITCHENER.

CHIEF OF FIELD MARSHAL ROBERTS' STAFF. Modder River cost 1, 167 lives, and at Magersfontein, where his progress was stopped, he lost 967 more men. He then remained at a standstill until General Roberts arrived with reinforcements. drove the Boers back, finally captured General Cronje and some 4,000 of his troops, and raised the seige of Kimberley. This occurred on February 27th.

Lord Roberts reached Modder River February 9th, where a force of British troops had been concentrated. February 11th British cavalry and mounted infantry began the movement

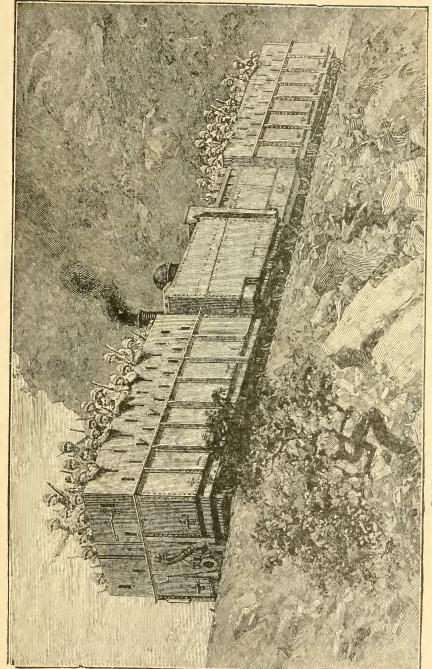
in General Cronje's flight toward Bloemfontein, capital of Orange Free State, his being surrounded at Paardeburg on February 19 after a series of rear-guard engagements and his surrender on February 27, as already stated. Meanwhile Kimberley was incidentally

relieved on February 15, after a siege of 123 days.

In the latter part of October, soon after the war began, battles were fought in the northern part of Natal, yet were not decisive. The British troops encountered a strong force of Boers at Dundee, and also at Elandslaagte. On October 20th the Boer General Inkas Meyer's column attacked the British force under General Symons. The British troops suffered severely, and General Symons was mortally wounded. At Elandslaagte, October 21st, a British column under General French, commander of cavalry, routed the Boers. General-Yule withdrew the British forces to Ladysmith, and this town was besieged. The troops at Ladysmith, under command of General White, resisted their

foe bravely, repulsed several attacks, and the garrison, consisting at first of 12,000 men, together with the residents of the town, was reduced to sore straits and suffered great privations.

General Buller and British troops attempting to force their way to Ladysmith, to relieve the besieged town, met with several disastrous repulses and were forced back to the south side of the Tugela River. On January 23d, 24th and 25th they captured Spion Kop (Bluff) after sharp fighting, involving heavy losses, but were compelled to abandon the position. General Buller on the Boer's left flank which resulted began his fourth attempt to force his



BRITISH ARMORED TRAIN MAKING A RECONNOISSANCE

way to Ladysmith on February 14th, and for a number of days fought a continuous battle.

The disasters that overtook the Boers on the western border compelled them to abandon the siege at Ladysmith,



GENERAL SIR GEORGE STEWART WHITE.

and on February 28th General Dundonald with the Natal Carbineers and a composite regiment entered Ladysmith. The garrison were on a half pound of meal daily per man and were supplementing the meat ration with horses and mules. It was learned that General White had withstood a heavy bombardment, repelled two hard pressed attacks and made two successful sorties. The troops suffered much from typhoid fever and lack of food and medical supplies.

It will be of interest to the reader to learn what explanation the Boers gave of their retreat and of the attendant military operations. The following was sent out from the Boer camp at Biggarsberg:

"The Federals have fallen back on the Biggarsberg chain, crossing Natal south of Dundee. The retreat from Ladysmith was due to the mistake of a certain commandant in ordering his men to retire from the key of the posi-

tion without any reason for the move.

"On the receipt of the bad news from the Modder River on February 28th it was resolved to send the wagons back to Biggarsberg, and soon long strings of ox wagons lined the roads. Over a thousand wagons took the westerly route to the laager southwest of Ladysmith. Another convoy was sent to the foot of the Drakensberg. A large number of tents captured from the British at Dundee and also the ammunition were of necessity abandoned.

"The chief difficulty was in dismounting 'Long Tom.' The Boers were independent of the railway, as is shown by the fact that not one of their two thousand wagons went by

rail. All travelled by road, together with the field batteries. Only the heavy guns, the infantry and wounded went by rail.

"When the last train had left Elandslaagte a workman's train followed, carefully blowing up every bridge and culvert between Ladysmith and Glencoe, and, when this had been done, setting fire to the Elandslaagte collieries. Thus the British, with Natal's southernmost collieries in their hands, are unable to draw supplies therefrom.

"Under cover of the night and with the collieries sending lurid flames to heaven the bullock wagons wound over the hills, making roads where none before existed; and the four mouths' siege of Ladysmith was raised. It is impossible as yet to give the burgher casualties, owing to the disorganization of the ambulance corps and the circumstances of the retreat."

Roberts' victory over the Boer rear guard as he pressed on toward Bloemfontein appears to have been decisive. The burghers withstood the cavalry and horse artillery of Colville and Kelly-Kenny, but were turned and dislodged by the infantry. The Welsh and Essex regiments drove the Boers from their intrenched positions at the point of the bayonet. The British losses were unknown. As the troops continued to advance Roberts telegraphed the names of few casualties. The Boer losses must have been considerable, as 102 of their dead were left on the field.

Aasvogel Kop, which the British reached March 11th, was expected to be the last place at which the Boers would make their stand before Bloemfontein. No such stand was made, and Roberts' cavalry on that date were practically at the gates of Bloemfontein, and the way to the Capital was open to the whole force.

Peace proposals having been made by the Boer government, unconditional surrender on the part of the Transvaal and Orange Free State, and an absolute declination to consider any proffer of good offices or intervention on the part of any foreign Power, was the policy decided upon by the British Government. Leader Balfour's announcement of the terms on which her Majesty's Government were willing to end the war created the liveliest interest among the members of all shades of politics. It quite overshadowed, in the public mind, for the time being, the importance of Roberts' advance on Bloem-fontein.

The document was very brief, consisting of only two telegrams. The first was a communication from Presi-



GENERAL FRENCH, COMMANDER OF THE BRITISH CAVALRY.

dents Kruger and Steyn, expressing the readiness of the Transvaal and Orange Free State to surrender, provided the independence of the Republic was assured, the reply of the government was a peremptory refusar to entertain any such terms. There must be unconditional surrender.

In the Parliamentary lobby the idea of entertaining any such proposals was altogether scouted. The military experts believed that the end of the war was still far distant. A prominent member of the Government stated that no settlement with the South African Republics would be possible which failed as a starting point to provide for the disarmament of the Boers and the demolition of their fortresses.

Lord Roberts again turned the Boer

position, and with his entire force, which comprised 40,000 men, arrived at Ventersveller, twelve miles southwest of Bloemfontein. The Boers, who numbered 12,000 men, with eighteen guns, were entrenched along the main road to the Free State capital, but the British, by keeping south and following Kraal Spruit instead of the Modder, flanked them.

Critical Situation.

It was now doubtful if the burghers would make any further attempt to defend Bloemfontein. If they did they would have to take up a new position where they would have but little time to entrench themselves. Such was the critical situation in which the Boer army was placed.

On March 13th was issued at London a correspondence of greatest moment between the Republics of South Africa and the British Government. It first gave the telegrams sent by the two presidents to the Marquis of Salisbury, as follows:

"Bloemfontein, March 5.—The blood and tears of thousands who have suffered by this war and the prospect of all moral and economic ruin wherewith South Africa is now threatened, make it necessary for both belligerents to ask themselves dispassionately and as in the sight of the triune God for what are they fighting and whether the aim of each justifies all this appalling misery and devastation.

"With this object and in view of the assertions of various British statesmen to the effect that this war was begun and is being carried on with the set purpose of undermining Her Majesty's authority in South Africa and of set-

ting up an administration over all of South Africa independent of Her Majesty's government, we consider it our duty to solemnly declare that this war was undertaken solely as a defensive measure to maintain the threatened independence of the South African Republic, and is only continued in order to secure and maintain the incontestable independence of both Republics as sovereign international states and to obtain the assurance that those of Her Majesty's subjects who have taken part with us in this war shall suffer no harm whatever in person or property.

Terms of Peace.

"On these conditions, but on these conditions alone, are we now, as in the past, desirous of seeing peace re-established in South Africa, while, if Her Majesty's Government is determined to destroy the independence of the republies there is nothing left to us and to our people but to persevere to the end in the course already begun. In spite of the overwhelming pre-eminence of the British Empire we are confident that God, who lighted the inextinguishable fire of love of freedom in the hearts of ourselves and our fathers, will not forsake us and will accomplish his work in us and our descendants.

"We hesitated to make this declaration earlier to your excellency as we feared that as long as the advantage was always on our side and as long as our forces held defensive positions far within Her Majesty's colonies, such a declaration might hurt the feelings and honor of the British people.

"But now that the prestige of the British Empire may be considered to be assured by the capture of one of our

forces by Her Majesty's troops and that we have thereby been forced to evacuate other positions which our forces had occupied, that difficulty is over and we can no longer hesitate to clearly inform your government and people, in the sight of the whole civilized world, why we are fighting and on what conditions we are ready to restore peace."

Salisbury's Sharp Reply.

The Marquis of Salisbury to the president of the South African Republic and Orange Free State:

"Foreign Office, March 11.—I have the honor to acknowledge your honors' telegram dated March 5 from Bloemfontein, of which the purport is principally to demand that Her Majesty's government grant the 'incontestable independence' of the South African Republic and Free State, 'as sovereign international states,' and to offer on these terms to bring the war to a conclusion.

"In the beginning of October last peace existed between Her Majesty and the two Republics under conventions which then were in existence."

"A discussion had been proceeding for some months between Her Majesty's government and the South African Republic, of which the object was to obtain redress for certain very serious grievances under which the British residents in South Africa were suffering.

"In the course of these negotiations the South African Republics had to the knowledge of Her Majesty's government made considerable armaments, and the latter had consequently taken steps to provide corresponding reintorcements of the British garrisons at Cape Town and in Natal.

"No infringement of the rights guar-

anteed by the conventions had up to that point taken place on the British side. Suddenly, at two days' notice, the South African Republic, after issuing an insulting ultimatum, declared war upon Her Majesty, and the Orange Free State, with whom there had not even been any discussion, took a similar step.

"Her Majesty's dominions were immediately invaded by two Republics. Siege was laid to three towns within the British frontier, a large portion of two colonies was overrun, with great destruction of property and life, and the Republics claimed to treat the inhabitants of extensive portions of Her Majesty's dominions as if those dominions had been annexed to one or the other of them.

"In anticipation of these operations the South African Republics had been accumulating for many years past military stores on an enormous scale, which, by their character, could only have been introduced for use against Great Britain.

Secret Preparations.

"Your honors make some observations of a negative character upon the object with which these preparations were made. I do not think it necessary to discuss the questions you have raised. But the result of these preparations, carried on with great secrecy, has been that the British Empire has been compelled to confront an invasion which has entailed upon the Empire a costly war and the loss of thousands of precious lives. This great calamity has been the penalty Great Britain has suffered for having of recent years acquiesced to the existence of the two republics.

"In view of the use to which the two

Republics have put the position which was given them and the calamities their unprovoked attack has inflicted on Her Majesty's dominions, Her Majesty's government can only answer your honors' telegrams by saying they are not prepared to assent to the independence either of the South African Republic or the Orange Free State."

Intervention Solicited.

Our government at Washington was asked by Presidents Kruger and Steyn, through the United States Consul Adelbert S. Hay, at Pretoria, to intervene for the purpose of restoring peace. The representations made by our government to Great Britain were to the effect that any thing the State Department could do in the interests of peace would gladly be undertaken. The well known aversion of the British government to any foreign intervention does not appear to have been aroused, and, while Lord Salisbury stated he was unable to comply with the offer, he expressed his appreciation of the United States' efforts on behalf of humanity.

Mr. Hay and the other consuls, subsequent to Presidents Kruger and Steyn sending their peace cablegram to Lord Salisbury, were asked to endeavor to secure the good offices of their respective governments, apparently with a view of bringing outside influence to bear upon Lord Salisbury's reply to the Boer overtures. These seem to have been fruitless, except in the instance of the United States consul, whose representations to Secretary Hay were forwarded March 12th to the United States embassy in London with the instructions outlined above. These Mr. White, the charge d'affairs, personally presented to

Lord Salisbury, who received them cordially but without committing himself to any definite expression of opinion.

As the Boer overtures had already been answered to the effect that no propositions including the maintenance of the Republics' independence could be considered, the presentation of the American offer was already too late, but the premier apparently deemed it a matter of sufficient importance to put himself on record with a formal reply.

Europe Indifferent.

Salisbury's declaration sounded the death knell of the independence of the Transvaal and the Orange Free State. The appeal of Presidents Kruger and Steyn to the Powers for intervention fell upon unheeding ears. From the capitals of Europe there was no response. Despatches from Berlin, Paris, Vienna, St. Petersburg and Rome were all of the same tenor. Every Government realized that England was determined to settle the affair herself in her own way this time.

There is a marked difference from a diplomatic standpoint between intervention and mediation. Intervention implies that one of the parties might perhaps brook no interference, but that intervention would take place despite this. No Power whatever displayed the slightest intention to intervene in any way. Berlin, Paris, Vienna and Rome all notified their representatives at Pretoria that they could not interfere.

As regards mediation, it was considered highly improbable that any one of the European powers would take the initiative and put the question to Great Britain whether mediation was desired.

The Kaiser's Government replied that Germany would be ready to co-operate in any movement for mediation as soon as it became clear that both parties desired it.

Very soon stirring news came from the British column that for a number of days had been pressing on toward the capital of the Orange Free State. London and all other British and colonial towns were excited and made jubilant by another victory of the British forces. Following is the text of Lord Roberts' despatch to the War Office in London announcing his occupation of the capital of the Orange Free State:

Lord Roberts' Despatch.

"Bloemfontein, Tuesday, March 13, 8 P.M.—By the help of God and the bravery of Her Majesty's soldiers, the troops under my command have taken possession of Bloemfontein. The British flag now flies over the Presidency, evacuated last evening by Mr. Steyn, late President of the Orange Free State. Mr. Fraser, member of the late executive government; the Mayor, the Secretary to the late government, the Landrost and other officials met me two miles from the town and presented me with the keys of the public offices. The enemy has withdrawn from the neighborhood, and all seems quiet. The inhabitants of Bloemfontein gave the troops a cordial welcome."

The events immediately preceding the entrance of the British into Bloemfontein are detailed in two despatches from Lord Roberts. One dated Venter's Vlei at half-past 9 o'clock on the evening of March 12th, said: "Our march was again unopposed. We are now about eighteen miles from Bloemfon-

tein. The cavalry division is astride the railway six miles south of Bloem fontein. There were 321 men wounded, and about sixty or seventy were killed or are missing. The wounds are, as a rule, more serious than usual, owing to the expanding bullets which are freely used by the Boers."

A second despatch, dated twenty minutes after 5 o'clock next morning, said: "I directed General French, if there were time before dark, to seize the railway station at Bloemfontein and thus secure the rolling stock. At midnight I received a report from him that, after considerable opposition, he had been able to occupy two hills close to the railway station, which commanded Bloemfontein. A brother of President Steyn has been made a prisoner. The telegraph line leading northward has been cut and the railway broken up. I am now starting with the Third Cavalry Brigade, which I called up from the Seventh division, near Petrusburg, yesterday, and the mounted infantry, to reinforce the cavalry division. The rest of the force will follow as quickly as possible."

British Forces at Bloemfontein

A few hours after this despatch was sent the Capital was occupied, an account of which is furnished by an eyewitness as follows:

"Bloemfontein, Tuesday, March 13th.—Lord Roberts entered Bloemfontein at half-past one o'clock to-day, followed by the Gordon Highlanders, a cavalry brigade and three batteries of horse artillery. Steyn, Fischer and other prominent officials fled privately from the Capital last night, transferring the seat of government to Kroonstad. The

State's position had been discussed for several days between the war and peace parties in the town. Prominent dignitaries, among them Kellner and Fraser, surrendered the town to Lord Roberts at noon to-day.

Advance of General French.

"General French reached the railway seven miles south yesterday afternoon, destroying the track north and south. The object of this step was to delay the arrival of Joubert and block the retreat of the enemy. Since the affair at Abraham's Kraal there has been only a single skirmish yesterday, when the cavalry were engaged. With your other correspondent I got within a hundred yards of the Boer's trenches at Abraham's Kraal. We were hunted for eight miles and our horses shot. The back of the war here is broken. populace are cheering Roberts and the soldiers and Union Jacks are flying everywhere."

Two newspaper correspondents were the first to enter Bloemfontein. General French had sent out scouts to feel their way toward the town, perceiving which the correspondents of the "Sydney Herald" and the "London Daily News," with one other, galloped forward and entered the town, which wore an everyday aspect. The people were out shopping or for morning walks, and at first the two newspaper men were regarded as townsfolk. When later it became known that they were the forerunners of the British army they were greeted cordially and conducted to a club, where they met Mr. Fraser, of the Executive Council; the Mayor and other officials. These they persuaded to take carriages and go to meet Lord Roberts.

As the party drove out of the city the British cavalry were closing around like a high net. The deputation soon arrived opposite the kopje where Lord Roberts was stationed, and one correspondent rode forward and had the honor of announcing to the commander-in-chief that Bloemfontein would surrender.

A little later the deputation began to approach and Lord Roberts went forward to meet them. The scene was picturesque in the extreme. A few yards away the guns of a battery pointed their grim mouths toward the late position of the Boers, while the tin roofs of Bloemfontein shone in the distance. After salutes had been exchanged, a member of the deputation stepped forward and declared that the town, being without defense, wished to surrender, hoping that Lord Roberts would protect life and property. He replied that, provided there was no opposition, he would undertake to guarantee the security of both.

Siege of Mafeking.

Lord Roberts notified the deputation of his intention of entering the town in state and they withdrew to inform the townspeople. Lord Roberts then made his military dispositions, ordering the First Brigade to follow him and take possession of the town. With his staff and military attaches he descended the kopje, and he arrived on the plain, where he waited until the cavalry approached. Then he entered the city, followed by his personal staff, the general staff, the military attaches and the troops.

The following was reported from Mafeking under date of February 19th:

"Horse meat now composes a considerable part of our rations. There is little grumbling. The first pinch of the siege is over, and the town has settled grimly to stick it out. What may be typhoid malaria has broken out in the women's laager, and dysentery, due to the absence of vegetables, is rife among the garrison. We are thrown upon our own resources. Such luxuries as we had are exhausted or have been commandeered for the hospitals, which are filled to overflowing. The children's graveyard, close to the women's laager, grows weekly, as the young lives are cut short prematurely by shell and fever. We look with hope deferred for relief

Intense Suffering.

"The cheerfulness which was characteristic of the early days of the siege has almost deserted us, the men preferring to remain at their posts rather than move about and work up an appetite which cannot be satisfied. The natives are in the worst plight. Those who are unable to obtain work are allowed a small handful of meal daily. Many braving the danger wander about the town with gaunt and hungry faces in search of work, which entitles them to an extra ration of meal. If they find work they are generally too weak to perform it.

"From their advanced posts the Boers rake the streets and the market square. It is impossible to dodge their bullets. We have taken remarkable precaution, however, and the casualties, though heavy, are not what they might have been had less able men been at the head of affairs."

The same distress was reported on March 13th, only intensified.

A despatch from the besieged town said: "The garrison is holding its own. We have heard numerous rumors that the siege will be raised, but so far that is not the case. We are living along patiently on quarter rations, supplemented by the occasional capture of cattle. Our home-made gun erratically bombards the Boer trenches. Horrible stories are current that the Boers are inflicting nameless tortures upon captured native runners. These may not be true, but they are tending to inflame native passions to such an extent that it may soon be impossible to hold the natives in check.

"Owing to the Boers having deliberately bombarded the native stadt, which is full of women and children, Colonel Baden-Powell has armed the natives, but he has only allowed them to act on the defensive, although they have clamored to be allowed to go out and attack at the point of the assegai. They will be prevented as long as possible from inflicting reprisals on the Boers."

Death of General Joubert,

The famous Boer General, who was the leading spirit of the war on the Boers' side, died at Pretoria, March 29, 1900.

When the advance of Lord Roberts on Bloemfontein made it necessary from a military point of view to abandon the line of defence along the Tugela River, which had been so long and stubbornly held by his army, General Joubert conducted with consummate skill the retreat northward to take up fresh defensive positions at Biggarsberg, with Laing's Nek in his rear.

Strong enemy and bitter foe as was Joubert, the news of his death excited

no rancorous feeling or unseemly satisfaction, even in the army ranged against him in Natal. A kindly sentiment, in fact, had already been produced by several instances in which General Joubert had, immediately before the outbreak of the war and during its brief course, thisplayed his humane and courteous disposition. One such was when he sent a message of condolence to Lady Symons, after the death of General Penn Symons in the hospital at Dundee.

Praise from an Enemy.

Nor did the side of the Boer General's character pass unacknowledged by the British leaders against whom he was pitted. Only two days before his death, Sir George White, the gallant defender of Ladysmith and a commander in chief in India, in a speech at Cape Town, paid a willing tribute to his antagonist, who, he declared, was a soldier and a gentleman, and a brave and honorable opponent.

How popular he was with his own folk has perhaps never been better shown than in the picturesque scene described by Mr. Bennett Burleigh, the war correspondent who literally stormed Joubert's special train and travelled with him on his way to the front. At the stations the Boers clustered about the General to shake hands with him. He got down from the train and said a few words of encouragement to the burgher soldiers at each stopping place.

But few public men of foreign countries were better known from their portraits than was Joubert, whether in his General's uniform or his ordinary dress as a Boer farmer, unless his compatriot President Kruger is excepted. The Boer leaders had much in common in

family history as well as in political association. Like President Kruger, Joubert was of sturdy stock. His name declares a French extraction, as he represented the intermarriage of French Huguenot settlers at the Cape with the original Dutch colonists.

The reasons that led to the "Great Trek," the passionate love of independence, even at the price of isolation from the outside world, swayed him to the end. When his countrymen conceded their country to the British through sheer inability to maintain a government of their own against their numerous enemies among the native tribes, Pietrus Jacobus Joubert was one of the protesting party. A demand for the re-establishment of the Republic was made to Sir Bartle Frere, but it was not until Kruger, Joubert and Pretorius formed themselves into a triumvirate in December, 1880, that they were able to carry their wishes into effect during the troubles in which Mr. Gladstone's government was then involved.

Great Organizer.

Joubert took the command in chief of the burgers and quickly showed that he had a military organization of singular effectiveness at his disposal. In a few weeks defeats were inflicted on the British troops as they endeavored to penetrate the Transvaal. Laing's Nek was followed by the overwhelming disaster of Majuba Hill, in February, 1881, and at the convention signed at the foot of the mountain General Joubert practically won back for the time being the independence of his country.

His association with Paul Kruger developed as time went on into active rivalry. A keen contest for the Presi-

dency of the Republic took place between them in 1893, when the General received 7,009 votes, against the 7,881 given to Mr. Kruger. In 1899 "Oom Paul" had it nearly all his own way, gaining re-election by 12,000 votes, whereas Joubert was but third in the contest, with only 2,000 votes.

Joubert's Strategy.

Under his direction, as head of the military forces the organization of the Republic's army was brought to a pitch of perfection, as the campaign showed. In taking the offensive in the war, Joubert's strategy showed generalship of a high order, and dauntless persistency in the face of serious checks when his farmers met trained troops in close conflict.

No doubt he was entitled to a great part of the credit for the perfect state of preparation in which the Boer armies took the field at the outbreak of hostilities, the ample supplies of heavy artillery, and the admirable use made of strong positions of defense. He was active in the first days of mobilization, and exercised constant supervision over the preliminary movements of the invasion of Natal.

It was he who was in command of the Boers during some of the fiercest assaults made by General Buller in the effort to beat his way through to Ladysmith; and it is supposed that he directed the masterly retreat northward, without the loss of man or gun, after contesting every foot of the ground, when the strategy of Lord Roberts made his position untenable. He was prevented from entering Bloemfontein by General French's capture of the railroad. Reports of his ill health had been com-

mon, and there were stories too, of his unpopularity and loss of authority; but the general belief was that he was engaged in superintending the construction of defenses for Pretoria, in readiness for the expected siege by Lord Roberts. His death following the capture of Cronje, left the Boers without the services of their two most famous and able commanders.

Mobility of the Boers.

General Joubert could collect his whole army in forty-eight hours, a much speedier mobilization than any other nation could boast of. He divided the Transvaal into seventeen divisions, each under a commander. These again were subdivided into sections, commanded by field cornets and assistant field cornets. The wonderful mobility of his forces, practically a mass of irregular mounted infantry, has been the subject of repeated comment and undisguised admiration on the part of many British commanders.

When the Boers raided British territory, Bechuanaland, in 1884, General Joubert was probably the only prominent Boer who refused to support the movement, and his opposition resulted in the withdrawal of the Boers from the territory seized, as he threatened resign unless he had his way, saying: "I positively refuse to hold office under a government that deliberately breaks its covenants, and we have made covenants with England."

Although some of the younger commanders thought the old soldier wanting in dash and enterprise, his raid into the country south of the Tugela was considered the best piece of Boer leadership during the whole war. It is now known

that he crossed the Tugela with only 3,000 riflemen and six guns, but so bold and rapid were his movements that the British commanders thought 10,000 Boers were marching on Pietermaritzburg.

For a few days, although in the presence of greatly superior forces, he isolated General Hildyard's brigade at Estcourt and at the same time threatened General Barton's camp at Mool river. Then, as British reinforcements were pushed up, Joubert recrossed the Tugela without losing a prisoner, a wagon or a gun. General White's estimate of him, pronounced two days before he died, as a gentleman and a brave and honorable opponent, illustrated the tone of all British comment.

After the Boers were driven rim Bloemfontein they concentrated at Wepener, a short distance to the sonth-east. This place was held by the British, who successfully resisted several sharp attacks. By the latter part of April, 1900, there was great activity in the campaign to the eastward of Bloemfontein.

It was now six weeks since Lord Roberts' army reached the capital of

the Free State, and his army, which had been facing northward, now faced about to the eastward in an effort to drive back several Boer detachments that were operating against its right flank and menacing its line of communications.

The advance of two British divisions. numbering about ten thousand men, to the vicinity of Sanna's Post was apparently the first step in a flank movement by which Lord Roberts hoped to head off the Boer army, when it retired from Wepener, Dewetsdorp, Thaba Nehu and other points northward. Already Wepener had been abandoned by the Boers and the British garrison relieved. This would have been necessitated by the movements of the British forces toward Sanna's Post, even if no reinforcements had been sent to the Wepener garrison.

But the Boer forces on the British flank were not yet captured or defeated. They still held the interior line, and threatened to concentrate for an attack upon some part of the net in which the British commander was trying to enclose them.

PART V. MARVELLOUS INVENTIONS

SCIENTIFIC DISCOVERIES

OF THE

NINETEENTH CENTURY.

CHAPTER XXIX.

Triumphs of Electricity.

HE electric telegraph, the subma- left but meagre opportunity for invenrine cable, the telephone, the phonograph, wireless telegraphy, the electric light and the many applications of electricity to locomotion, resulting in trolley cars, the automobile, etc.—these were all unknown at the beginning of the Nineteenth Century. It has been a century of marvels, of dazzling achievements by inventive genius, and its glory far surpasses that of any other hundred years since the dawn of history. The lightnings of beaven have been tamed and framessed for the service of man.

The electric telegraph must always be associated with the name of Professor Samuel F. B. Morse, He did not conceive the idea of using electricity for communicating thought, but the practical application of electricity for this purpose, and the success of the wonderful undertaking are due to his inventive genius. Nothing in the way of invention has ever surpassed his triumph, nor has there been any other system of telegraphic signs and letters so perfect as his. He

tors who should come after him, and yet we now have wireless telegraphy, that amazing triumph of inventive skill.

Professor Morse was born at Charlestown, Massachusetts, on the 27th of April, 1791, and graduated at Yale College, 1810. In 1829 he went abroad for the purpose of completing his art studies. He remained in Europe for more than three years, residing in the principal cities of the Continent. During his absence he was elected Professor of the Literature of the Fine Arts in the University of the City of New York. He set out on his return home to accept this professorship in the autumn of 1832, sailing from Havre on board the packet-ship Sully.

Among his fellow-passengers were a number of persons of intelligence and cultivation, one of whom had but recently witnessed in Paris some highly interesting experiments of the electromagnet, the object of which was to prove how readily the electric spark

could be obtained from the magnet, and the rapidity with which it could be disseminated. To most of the passengers this relation was deeply interesting, but to all save one it was merely the recital of a curious experiment. That one exception was Mr. Morse. To him the development of this newlydiscovered property of electricity was more than interesting. It showed him his true mission in life—the way to his true destiny. Art was not his proper field now, for however great his abilities as an artist, he was possessed of genius of a higher, more useful type, and it was henceforth his duty to employ it. He thought long and earnestly upon the subject which the words of his fellow-passenger had so freshly called up, pacing the deck under the silent stars, and rocked in his wakeful berth by the ocean whose terrors his genius was to tame, and whose vast depths his great invention was to set at naught.

Morse's Alphabet.

He had long been convinced that electricity was to furnish the means of rapid communication between distant points, of which the world was so much in need; and the experiments which his new acquaintance had witnessed in Paris removed from his mind the last doubt of the feasibility of the scheme. Being of an eminently practical character, he at once set to work to discover how this could be done, and succeeded so well that before the Sully reached New York he had conceived not merely the idea of an electric telegraph, but of an electro-magnetic and chemical recording telegraph, substantially and essentially as it now exists, and had invented an alphabet of signs, the same in all important respects as that now in use.

The testimony to the paternity of the idea in Morse's mind, and to his acts and drawings on board the ship, is ample. His own testimony is corroborated by all the passengers (with a single exception), who testified with him before the courts, and was considered conclusive by the judges; and the date of 1832 is therefore fixed by this evidence as the date of Morse's conception, and realization also—so far as the drawings could embody the conception—of the telegraph system which now bears his name.

Patient Perseverence.

But though invented in 1832, it was not until 1835 (during which time he was engaged in the discharge of the duties of his professorship in the University of the City of New York) that he was enabled to complete his first recording instrument. This was but a poor, rude instrument at the best, and was very far from being equal to his perfected invention. It embodied his idea, however, and was a good basis for subsequent improvements. By its aid he was able to send signals from a given point to the end of a wire half a mile in length, but as yet there was no means of receiving them back again from the other extremity.

He continued to experiment on his invention, and made several improvements in it. It was plain from the first that he needed a duplicate of his instrument at the other end of his wire, but he was unable for a long time to have one made. At length he acquired the necessary funds, and in July, 1837, had a duplicate instrument constructed, and

thus perfected his plan. His telegraph now worked to his entire satisfaction, and he could easily send his signals to the remote end of his line and receive replies in return, and answer signals sent from that terminus.

Having brought it to a successful completion, he exhibited it to large audiences at the University of New York, in September, 1837. In October, 1837, Professor Morse filed a caveat to secure his invention, but his patent was not obtained until 1840.

Morse, in December, 1837, went to Washington to solicit from the Government an appropriation for the construction of an experimental line from Washington City to Baltimore—a distance of forty miles.

This line he declared would thoroughly test the practicability and utility of the telegraph. His petition was laid before Congress, and a committee appointed to consider it. He stated his plan to this body, and proved its practicability by actual experiments with his instruments. Considerable interest in the subject was thereby aroused in Congress and throughout the country, but he derived no benefit from it.

The session wore away in this manner, and at length ended without any action being taken in the matter. At length, in 1840, he received his long-delayed patent from the General Government, and, encouraged by this, determined to make another effort to bring his telegraph into use.

He was not able to do so until the session of Congress of 1842-43, when he presented a second petition to that body, asking its aid in the construction

of an experimental line between Baltimore and Washington. He had to encounter a great degree of skepticism and ridicule, with many other obstacles, not the least of which was the difficulty of meeting the expense of remaining in Washington and urging his invention upon the Government.

Still he persevered, although it



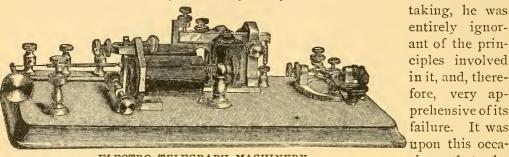
PROFESSOR SAMUEL F. B. MORSE, INVENTOR OF THE ELECTRIC TELEGRAPH.

seemed to be hoping against hope, as the session drew near its close, and his scanty stock of money grew daily smaller. On the evening of the 3d of March, 1843, he returned from the Capitol te his lodgings utterly disheartened. It was the last night of the session, and nothing had been done in the matter of his petition. He sat up late into the night arranging his affairs so as to take his departure for home on the following day. It was useless to remain in Washington any longer. Congress would adjourn the next day, and his last hope of success had been shattered.

On the morning of the 4th of March he came down to the breakfast-table gloomy and despondent. Taking up the morning journal, he ran over it listlessly. Suddenly his eye rested upon a paragraph which caused him to spring to his feet in complete amazement. It was an announcement that, at the very

but this occasion was a period of the most intense anxiety to him, for he knew that his entire future was staked upon the result of this hour.

Among the company present to witness the trial was the Secretary of the Treasury, John C. Spencer. Although very much interested in the under-



last hour of the session of the previous night, a bill had been passed by Congress appropriating the sum of thirty thousand dollars for the purpose of enabling Professor Morse to construct an experimental line of telegraph between Baltimore and Washington.

He could scarcely believe it real, and, as soon as possible, hastened to the Capitol to seek authentic information. The statement was confirmed by the proper authorities, and Morse's dearest wish was realized. The hour of his triumph was at hand, and his long and patient waiting was rewarded at last

Work on the telegraph line was 1mmediately begun, and carried on actively. At first an insulated wire was buried under ground in a lead pipe, but this failing to give satisfaction, the wire was elevated upon poles. On the 27th of May, 1844, the line was completed, and the first trial of it made in the presence of the Government officials and many other distinguished men. Professor Morse was confident of success:

fore, very appreliensive of its failure. It was upon this occasion that he asked one of Professor Morse's assistants how large a bundle could be sent over the wires, and if the United States

When all was in readiness Professor Morse seated himself at the instrument and sent his first message to Baltimore. An answer was promptly returned, and messages were sent and replies received with a rapidity and accuracy which placed the triumph of the invention beyond the possibility of doubt. Among the first messages ever transmitted was the announcement of the nomination of James K. Polk for the presidency.

mail could not be sent in the same way.

Congratulations were showered upon the inventor, who received them as calmly as he had previously borne the scoffs of many of these same men. Yet his heart throbbed all the while with a brilliant triumph. Fame and fortune both rose proudly before him. He had won a great victory and conferred a lasting benefit upon his race.

Professor Morse is also the inventor of submarine telegraphy. In 1842 he laid

the first submarine telegraph line ever put down, across the harbor of New York, and for this achievement received the gold medal of the American Institute. On the 10th of August, 1843, he addressed a communication to the Secretary of the Treasury in which he avowed his belief that a telegraphic cable could and would be laid across the Atlantic ocean for the purpose of connecting Europe and America.

His words upon this occasion clearly prove that the idea of the Atlantic telegraph originated with him. They were as follows: "The practical inference from this law is that a telegraphic communication on the electro-magnetic plan may with certainty be established across the Atlantic ocean. Startling as this may now seem, I am confident the time will come when this project will be realized."

SUBMARINE CABLES.

In February, 1854, Mr. Cyrus W. Field, of New York, ignorant of Professor Morse's views upon this subject, wrote to him to ask if he considered the working of a cable across the Atlantic practicable. The Professor at once sought an interview with Mr. Field, and assured him of his entire confidence in the undertaking. entered heartily into Mr. Field's scheme, and rendered great aid in this noble enterprise. He was present at each attempt to lay the cable, and participated in the final triumph by which his prediction, made twenty-three years previous, was verified.

The first Atlantic cable was laid in 1858. After surmounting many obstacles and exhibiting a perseverence in the face of discouragements that commanded admiration, Mr. Field and the four other gentlemen who were associated with him, and had so much faith in the enterprise that they subscribed \$1,500,000 to carry it through, succeeded in connecting the two continents and transmitting messages. Great was the rejoicing in both hemispheres, but after 271 messages had been sent the power of transmitting intelligence utterly ceased, owing to the

employment of too high a battery power.

In 1865, a cable having been constructed and made as nearly perfect as possible by the use of the best materials, and by the most approved method of insulation, the steamship "Great Eastern," freighted with it, sailed from Valentia on the 23d of July. On the second day after starting from the Irish coast, a fault in the electric insulation of the cable was detected; a tiny piece of loose iron wire had forced its way through the outer covering and the gutta-percha surrounding the electric wire, so as to come in contact with the latter; and, when this piece was cut out and a new splice made, the fault was effectively cured.

The cable had again to be raised and examined in the same way on the 29th, when the ship was in two thousand fathoms water, six hundred and thirty-six miles from Valentia, and one thousand and twenty-eight miles from Newfoundland. A total loss of electric insulation or "dead earth," as it is called, was discovered about one o'clock that afternoon. The ship was stopped at once, and as soon as the picking-up machinery could be put in gear, the

end of the cable was hauled in again over the bows, and the faulty portion having been cut off and laid aside for a minute examination, the remainder was spliced afresh, and the operation of paying-out over the stern of the ship was recommenced next morning.

Soon after this it became necessary to "pick up" the cable to remedy a defect which the instruments had detected, when that memorable accident occurred which taxed the ingenuity of those on board to remedy it. The machinery was still in motion, the cable and the rope traveled aft together, one towards the capstan, the other towards the drum, when, just as the cable reached the dynamometer, it parted, thirty feet from the bow, and with one bound leaped, as it were, into the sea.

Consternation on Board.

For a moment dismay seized those on They were startled at the thought that the cable had parted and dropped into the sea. Nothing was to be done but to adjust the grappling apparatus and search for the lost treasure. At first the iron sank but slowly, but soon the picking-up machinery lowered length after length over cog-wheel and drum, till the iron wires, warming with work, heated at last so as to convert the water thrown upon the machinery into clouds of steam. Still the rope descended, and the strain was diminished, when at two thousand five hundred fathonis, or fifteen thousand feet, the grapuel reached the bed of the Atlantic; and as the ship drifted across the course of the cable, there was just a surmise that the grapnel might catch it.

In the search from August 3d to August 11th, the cable was grappled

three vance; it was lifted each time a considerable way from the bottom, but the grapnel, ropes and lifting machinery were not sufficient to bring it to the surface. Nearly twelve hundred miles of the cable now lay along the bed of the Atlantic Ocean; one end attached to the shore at Valentia, the other submerged under nineteen hundred and fifty fathoms of water, and resting on a soft, oozy bottom.

A length of fifty-five hundred miles of cable altogether had been made for this great Atlantic enterprise from 1858 to 1865, and nearly four thousand miles had been swallowed up in the ocean; a million and a quarter dollars had been sunk; but the grand hopes were not crushed. The various telegraphic companies interested in the completion of the undertaking wisely concluded to resume operations forthwith.

Locating the Cable.

The storms of twelve months had passed over the cable before the preparations were complete; that it had not drifted was thoroughly believed. The naval commanders had made accurate observation of the exact latitude and longitude of the spot where the end of the cable finally disappeared in August, 1865; and, as the same nautical instruments, applied in the same way, would find the same spot again, this was the test, and the only test relied on.

The Great Eastern arrived on the 12th of August at the cable-fishing ground. We have not space to detail the series of snatchings, losings, raisings and breakings, dodgings and fishings of the vessels engaged in this cablecraft. but pass on to the 16th, when while hauling up the grapuel the splice

between the grapnel-rope and the buoyrope broke, and down went rope, grapnel, cable and all.

The position being a good one, another grapuel was put forth; it was dragged; the strain on the dynamometer (the instrument that shows the amount of force or weight pulling at the grapuel-rope, in addition to its own weight) indicated that the grapuel had got hold of the cable; it was hauled in; and lo! on the 17th up came to sight the actual cable itself! Nearly every one on board the ship crowded to the bows to see the grapuel come up over the water.

The lost cable of 1865, lifted from its oozy bed two miles beneath the surface of the Atlantic Ocean, now made its appearance, attached to the flukes of the grapnel, amid a spontaneous cheer; the sound of this, however, had scarcely passed away when the fact became

known that the cable had quietly and easily disengaged itself from the flukes and springs of the grapuel.

The cable was found, not merely bodily, but with all its electric qualities in full efficiency. The cable itself told the tale. There it was, the copper in the middle, then the gutta-percha, then the iron wires and then the outer covering of Manilla hemp. The problem to be solved was, whether the cable after being twelve months at the bottom of the Atlantic, would transmit an electric message to Valentia.

An operator applied the end of the cable to his delicate instruments, amid the breathless silence of those around him. Presently he took off his hat and gave a cheer—the cable spoke! Human ingenuity and perseverence had triumphed. Since that day the ends of the earth have been brought near by submarine cables.

THE TELEPHONE.

Following the completion of the submarine cable, the next application of electricity that aroused universal interest resulted in the discovery and construction of the telephone.

Suppose you want to communicate with your neighbor across the street; a wire is stretched between the two houses and connected to the two telephones; from the remaining binding screw of each telephone wires are conducted, say, to the gas-pipe, and the bare wire wound round the bare pipe, so that there may be metallic contact. Conversation may now be carried on as in the annexed figure. For short distances you will perhaps find least difficulty by using a double wire instead of connecting to the brass pipe, as the

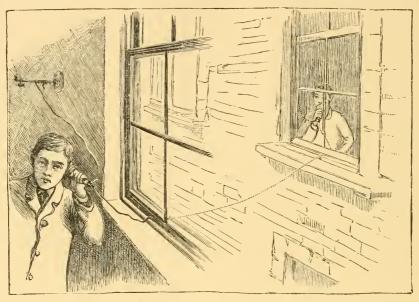
Following the completion of the sub- joints of the latter sometimes intercept arine cable, the next application of altogether the flow of electricity.

We already know that when soundwaves impinge on anything like the ferrotype plate of a telephone, such a plate is made to vibrate; and a piece of iron like this vibrating in the neighborhood of a magnet will considerably disturb its lines of force. If these fluctuating lines of force, therefore, are crossed by rings of wire, currents of electricity will be generated in the wire. And so it is every time one speaks into a telephone, for electricity is generated and sent along the wire to the other end, in a direction which varies with the "inand-out action of the telephone.

You will clearly see, then, that electricity is produced at the transmitting

end. What happens where the listener has his attentive ear to the telephone? The electricity travels round the coil of the *receiving* telephone, and varies the magnetism of the bar within it, which in its turn varies its attraction upon the ferrotype plate beginning to

ductor, a telegraphic wire, with electricity for the driving force, is the best transmitter ever discovered. The telephone has rapidly sprung into use, and has become a necessity in our large towns, where, on account of the pressure of business, time is money and



COMMUNICATING BY TELEPHONE.

vibrate, and it vibrates in such a way as to reproduce the sounds which were spoken into the transmitting end.

That we should ever be able to "talk by lightning" was not dreamed of for many years after the discovery of the telegraph proved that messages could be transmitted through motions of the electric instrument producing signs. Now we do not have to write the communication, but can speak to a person many miles away, and converse almost as freely as we would with one by our side in the same room.

The principle is that of the transmission of sound. The air, the water, woods, metals are all conductors, but it has been proved that a metallic con-

moments count for as much as hours did once. A man of business can call up his neighbor, who is near, or his customer miles away, and in a brief time the matter in hand is disposed of.

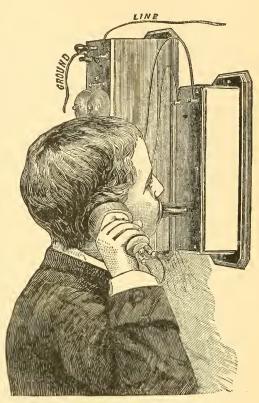
The description of the instrument is as follows: An electro-magnet or spool of copper wire is fastened to the end of a steel bar which has been charged with magnetism; the ends of the wire are carried down to the outer part of the rubber case, and connected by screws of the line wire.

In front of the spool, and a little way from the end of the bar magnet, a piece of "ferrotype" sheet iron is placed. When a current of electricity is sent into the telephone and through the spool of wire, the sheet iron plate is caused to vibrate in unison with the breaking of the current, by reason of the alternate attractions and cessations of attraction of the plate by the electromagnet, and a sound is produced, as already explained.

The microphone is an instrument for intensifying and making audible very feeble sounds. It produces its effects by the change of intensity in an electric current, occasioned by variations in the contact resistance of conducting bodies. It has always been known that many solids are excellent conductors of sound. One of the little experiments of boyhood is for one lad to hold his head under water while another, not far away, strikes two stones together under the surface. The water coming in close contact with the ear, and being a good conductor of sound, produces something in the nature of a shock, quite as startling as would be the firing of a pistol near one's head. This, it must be understood, is not the principle of the microphone or telephone. There must be a conductor for the electric current, but the current itself is indispensable.

Thus, not only by the telegraph can words be transmitted, but also in a more direct way, and even the tones of

spool of wire, the sheet iron plate is the human voice can be distinguished. caused to vibrate in unison with the It is literally true that we talk by



THE BELL TELEPHONE.

lightning, and can speak to a listener a thousand miles away. The century has found in electricity its most marvelous field of discovery.

THE PHONOGRAPH.

Another marvel of the century produced through the agency of electricity is the phonograph.

Very few, even of those who have heard the dulcet strains of some sweet song from the depths of the phonograph, understand in the least the mechanism by which the sounds are produced. The explanation is as follows: The phonograph is composed of a metal cylinder covered with a layer of wax, on which a pointed pen inscribes tracings, corresponding to the vibrations caught by a membrane placed on the top of the pen.

The wax-coated cylinder is rapidly revolved by means of an electric battery, and as one speaks in front of the membrane, the cylinder advances slowly in a horizontal position, at the same time revolving rapidly.

The membrane vibrates much or lit- | plied to their ears, as in the illustratle, according to the sounds emitted by the operator. The pen moves according to the vibrations, and peculiar, almost imperceptible tracings on the

tion.

Not only can we hear the sounds from the same phonograph into which they are spoken, but the cylinders may wax are the result. On top of the mem- be preserved and taken wherever we



MR. EDISON TALKING INTO THE PHONOGRAPH.

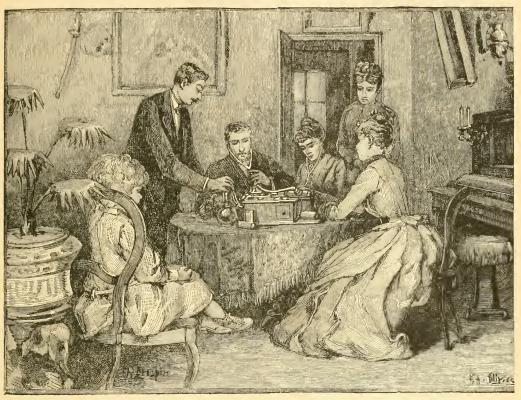
brane is a funnel into which the operator speaks.

To obtain reproductions of the sounds as inscribed on the wax cylinder, it is replaced in its original position. Another pen of different construction inan the first is put into play, and in a most exact and delicate manner transfers to the wax of another cylinder the tracings on the first. The funnel is replaced by a rubber tube having two, four or six branches, according to the number of the auditors, and the tubes are apwish; by placing them again in a mechanism as above described, the original sounds may be reproduced.

In this manner are made the phonographs found in many botels and public places. The first cylinder is carefully made as above described, and duplicated as many times as required. Each cylinder is then placed in a case, and the phonograph may be put in use when required.

The new and perfected Edison phonograph has already gone into very gentributed in American business offices, where they facilitate correspondence in a variety of ways. They are employed machines are in use by actors, clergy-

eral use, and many thousands are dis- | peated into the machine by the reporter as quickly as they were uttered by the various speakers. A large number of



LISTENING TO SOUNDS FROM THE PHONOGRAPH.

by stenographers as a help in the transcription of their shorthand notes. Heretofore these notes have been slowly dictated to amanuenses, but they are now frequently read off to a phonograph and then written out at leisure.

The phonograph is, however, being used for direct stenographic work, and it reported verbatim forty thousand words of discussion at one presidential convention, the words being quietly re-

men, musicians, reciters and others, to improve their elocution and singing. It is also worthy of note that voice records remain of distinguished men, who "being dead, yet speak."

The phonograph faithfully reproduces music, whistling, singing, speech, or any sounds, and the phonograms can be packed into a mailing tube and sent all over the world to be used as often as desired.

EDISON'S KINETOSCOPE.

the principle upon which this instru- it the reproduction of motion. The

Perhaps the simplest statement of | ment is constructed, would be to call

observer looks through a glass into a small cabinet and appears to see living figures. These may be men or animals, and they are in action. Just as the phonograph makes a faithful record of sounds, so the kinetoscope gives us a reproduction of the action of living creatures.

The following is what Mr. Edison himself says on the subject: "In the year 1887 the idea occurred to me that it was possible to devise an instrument which should do for the eye what the phonograph does for the ear, and that by a combination of the two all motion and sound could be recorded and reproduced simultaneously. This idea, the germ of which came from the little toy called the zoetrope, and the work of Muybridge, Marie and others, has now

been accomplished, so that every change of facial expression can be recorded and reproduced life size. The kinetoscope is only a small model illustrating the present stage of progress, but with each succeeding month new possibilities are brought into view.

"I believe that in coming years, by my own work and that of others, who will doubtless enter the field, grand opera can be given at the Metropolitan Opera House at New York, without any material change from the original, and with artists and musicians long since dead."

After the instrument was perfected the succession of pictures was found to be rapid, and those instruments exhibited in nearly all our towns are found to work most satisfactorily.

THE ELECTRIC LIGHT.

The applications of electricity during the century have revealed wonders not dreamed of in ordinary human philosophy. The problem, long studied by scientists, of procuring from this subtle force in nature a light that would be of service and outstrip all other means of illumination has been solved, and in every town now, of any dimensions, electric lighting is in successful operation.

Pure incandescence is represented by four systems—Edison, Maxim, Swan and Lane Fox. The light from this description of lamp is from the heating of a carbon filament due to its high resistance to the passage of the current. This filament is surrounded by a hermetically sealed glass bulb from which all the air has been extracted.

The life of the lamp depends greatly as to how carefully this process has

been carried on. It is not sufficient only to extract the air when the lamp is cold, but the process must be carried on, when the lamp is burning, and the exhaustion must be continuous for some time. These lamps can be worked either by an alternating or a continuous current machine; and, unlike those of partial incandescence, require a tension current, while the former work best with a quantity one.

The Edison lamp is generally considered to be the pioneer of this system of illumination. Whether this be so or not the name of the inventor has been for a considerable time associated with lighting by incandescence, although his early experiments were with a lamp containing a metallic substance. The lamp consists of a blown glass globe containing a very fine filament made from the fibre of bamboo

carbonized. The length is fixed according to the resistance required.

Each end of the filament is nipped between a miniature vise composed of platinum connected with the terminals of the lamp. These are fixed in an insulated socket, which also holds the glass bulb. The socket is furnished with a screw which fits into a projection on the bracket or holder, so that the act of screwing in the lamp makes the necessary connection with the conducting wires.

Distribution of Current.

By turning a tap the lamp can be removed without interrupting the passage of the current. The maximum duration of the lamp is stated to be twelve hundred hours. The chief feature of the Edison system is the manner in which the inventor distributes the current from a main generator of his own design, which is always used with this system of lighting.

The engraving on next page is a perfect representation of Edison's latest electric lamp, with its various parts shown in detail. Fig. 1 shows the carbon horseshoe ready for use, full size; Fig. 2 represents the horseshoe when just cut from the Bristol board, illustrating, by its comparison with Fig. 1, the enormous shrinkage it undergoes during the process of carbonization.

The only index to the completion of this process is the crackling of the oxide formed on the exterior of the iron boxes in which the horseshoes are placed. After their removal from the boxes the carbons are placed between the jaws of small platinum vises, a, a, supported on thin platinum wires blown in the glass base and forming the electrodes.

The resistance of the slender horseshoe is one hundred ohms.; and while the lamp shown, Fig. 3, is intended to give a light equivalent to a single four-foot gas jet, it may be forced to give a light equal to eight or ten of such jets.

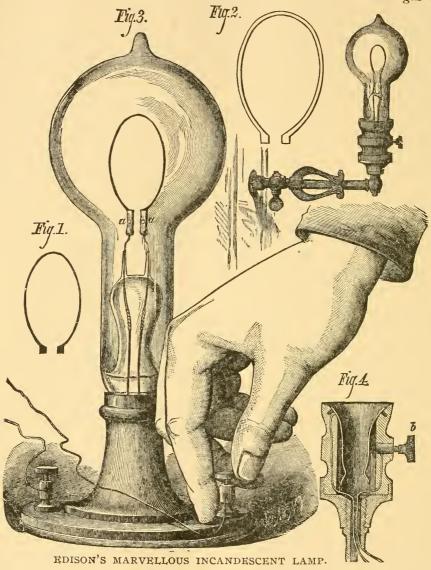
The carbons are so tough that one of them has been subjected to the test of applying and removing the electric current a number of times equivalent to thirty-six years of actual daily use, and without being in the least impaired. The horseshoe form of the carbon has a great advantage over the voltaic arc, the light being softer, more diffused and less trying to the eyes. It is, besides, perfectly uniform and steady. lamps are connected in multiple arc, that is, the two wires leading from the electrical generator run parallel to each other, and the lamps are placed between them and are connected with each wire.

Lamps and Wires.

The entire lighting apparatus of any building consists in the lamps and a few wires. The lamp in its present form is as simple and as easily handled as a candle, and can be taken from its socket and replaced even while the current is on. The construction of this socket is shown in Fig. 4. The lamp has, attached to its electrodes, slips of copper which are bent up against the sides of the glass, touching two springs at opposite sides of the socket. One of these springs is connected with one of the electrical conductors; the other merely touches the copper strip, and) does not form a part of the electrical conductor until it is touched by the thumb-screw, b, this latter being connected with the second electrical conducting wire. To start the light it is

only necessary to turn the screw, b, become one of the world's great bene-

till it touches the spring. To stop the factors. The use of the electric light light the screw is turned in the reverse has far exceeded the use of gas during



direction. From this it is obvious that I the same period of time after the introan electric lamp is more easily managed than a gas burner, as it requires neither lighting nor regulating; while it is equally plain that these lamps, having withstood the test of time, the inventor

duction of each. Many of the largest factories and public buildings are now lighted by electricity, and even in country villages and towns everywhere the electric light has been introduced into has solved a profound problem, and private residences. The time is doubtless not far distant when it will be the | perfected, and in no branch of science means for almost universal illumination. | have more rapid strides been made than Electrical apparatus is constantly being in this.

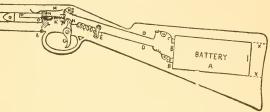
RIFLES FIRED BY ELECTRICITY.

The practice of firing big guns by electricity is already well established, but hitherto no practical attempt has been made to explode the shells of small arms electrically. An electric rifle has been designed in which it is sought to carry out this principle.

The source of the current is a bat-

tery, A, which is fitted into the stock either from the side or from the ends. The holes B B are connected to springs C C from which the wires D D run respectively to a spring M, bolted at I to the lock plate, and to the insulated hammer H fixed on the upper part of the trigger G. D is the shell, containing an insulated pin, the head of which, O, projects beyond the base of the shell. If necessary, two pins can be placed parallel with each other and insulated until their points nearly meet. Between the base of the cartridge and the hammer is a pin K encircled by a spring and riveted into a cross plate J at one end, the other end being fitted into an insunearly touches the shell pin head O. When the cartridge has been inserted and the gun closed, the spring M rests on the metal base of the cartridge.

As the trigger is pulled the hammer



ELECTRIC RIFLE.

strikes the plate J, forcing the point of the thimble L into contact with the projecting end O of the cartridge pin. An arc is established at PO, which explodes the contents of the cartridge.

The point of the firing pin P can be placed anywhere within the explosive powder of the cartridge, but by extending it near the bullet, as shown in the illustration, a more effective explosion of the powder is secured.

At the end of the Nineteenth Century messages could be sent across space, over water and through buildings and mountains without the aid of wires.

WIRELESS TELEGRAPHY.

Professor Gray devised a method of sending signals along light waves, and others tried transmitting telegrams to moving trains by means of the rails. These methods, however, were not successful in the main, and it was left for M. Guiglielmo Marconi, a Florentine yet in his twenties, to discover that Hertzian waves could be generated from

lated thimble L, the point of which

electricity and sent across space with out the means of intervening wires.

In 1895, while yet quite young, Marconi made experiments across his father's fields in Bologna, Italy, and by the use of tin boxes, called "capacities," set upon poles of varying height, and connected to separate instruments by insulated wires, he sent and received by a crude transmitter and receiver electrical signals without the aid of intervening wires. He soon learned that certain distances could be covered only by having the poles for his boxes of certain height, and the height of the poles had to be increased with the distance. He experimented with the aid of several other scientists for some time, and then the world was startled early in 1899 by the news that messages had been sent by this wireless method across the English Channel from Dover to Boulogne.

Little had been known up to that time of the process, but enthusiasm was now expressed everywhere, and when, in October of the same year, the young wizard came across to America to report the great international yacht races between the Columbia and the Shamrock, for the New York papers, and succeeded so admirably that messages were flashed across space when both yachts and sending ship were enveloped by fogs and out of sight of land, it was manifest that another epoch-making discovery had been made.

Strange Impulses.

The method employed by Marconi seems quite simple when it is known. Hertzian waves are strange undulations generated by electric impulse that travel through the atmosphere and have the peculiar property of jumping from the Marconi transmitter and fleeing through space at the speed of light, or seven times around the earth in a second. When Marconi understood that these beams could be sent and received by his first crude method, he at once set to work on improvements, and the following system has been the result.

Two tall poles are erected, one at the sending and one at the receiving station. From these poles are supported sprits, along each of which runs an ordinary copper wire extending vertically from the telegraph instruments into the air. The upper portion of the wire is bare, so that the waves of energy may leap off into space as they are sent up the wire by the operation of the instrument below. This instrument is simply a large induction coil connected with a strong battery.

Sending the Message.

To the coil are also attached two brass knobs (some distance apart), from the space between which, when the current is on, leaps a stream of sparks, the same as those produced in experiments with the X-ray. Now, when a message is being sent, the transmitting wire is charged with a current of electricity at high tension, which naturally rushes toward the earth. This discharge causes a rapid oscillation in the wire as long as the current continues. This oscillation must have an outlet, and, accordingly, leaves the wire for its journey across space. This agitation, when it reaches the receiving instrument, produces an opening and closing of the circuit accordingly as the waves are continuous or cut short.

To use a simple example, let us suppose we have a string hanging loose from the ceiling. Now take a fan and wave the air. The result is the string is blown back. Make several motions with the fan at short intervals, and the string will respond to the air waves. This is similar to what occurs in Marconi's telegraphing process. He has a switch connected with the sending in-

strument, and as he opens or closes this a stream of electrical sparks follows. It may readily be seen, then, that as these sparks impart the waves to the transmitting wire, a short one would send a short wave across to the receiver, and a long stream would produce a long set of waves. That is just what happens.

Hard Problem Solved.

When this much of the system was perfected, it was necessary to arrange some device whereby the gentle oscillations might be received and interpreted into messages. Here was a hard task, but it was successfully wrought out. In a metal box, that keeps out to a great extent the Hertzian waves, is a relay instrument, two devices called a "coherer" and a "tapper," and a Morse instrument for printing dots and dashes connected to a home battery.

The "coherer" is the principal and most delicate of all these instruments, and upon its action depends the success of the sending operation. It consists of a tiny glass tube about as thick as that of a thermometer and two inches long. In either end is a small plug of silver, attached to the aerial wire on the pole outside and to a wire connected with the relay instrument. It must be understood that a wave so delicate in its impulse would not be able to operate a machine of itself; it is only strong enough to give the impulse that will complete the circuit of the home battery, and the latter then works the writing machine.

But how can this impulse be given in dots and dashes of the Morse telegraph code? Simply enough, when ore knows how; and here came in Mar-

coni's greatest discovery. He learned that nickel and silver were alternately good and bad conductors of the Hertzian waves: good when welded to gether by a continuous current, but bad when severed into particles by a blow from his little "tapper." Hence, he contrived an arrangement of very tiny particles of nickel and silver dust,—siftings through silk,—and placed them between the silver plugs of his "co herer."

Now, when a wave impelled by a single spark from the transmitter is received by the vertical wire hanging in space from the pole of the receiving station, it comes down through the "coherer," and the tiny particles of nickel and silver cohere (hence the name), the current is imparted to the battery that sets the Morse instrument to printing a dot.

Completing the Circuit.

To explain more clearly just the uses of the "coherer" and the "tapper," we must remember that the power of the Hertzian wave is very slight; in fact, it could create no electrical disturbance were it not for its property of welding together the nickel and silver filings in the "coherer." What it can do, however, is to complete the circuit that will operate the relay instrument. Let us imagine the circuit of the relay is like an electric door-bell.

Well, the coherer is in the place of the push-button. As long as the filings are separate there is no sound, for the circuit is not complete. But let a Hertzian wave strike the coherer and the filings are welded together, the circuit is completed, and the relay instrument gives the sufficient electrical energy to operate the writing machine or ticker. But so long as the filings in the coherer are in cohesion the instrument will keep up one continuous buzz; hence no intelligible signals could be sent. Here is where Marconi made use of his Decoherer or "Tapper."

Little but Mighty.

It is no more than a little hammer attached to an electro-magnet, which, when operated by electricity, will tap against the coherer the same as the tapper of an electric bell; and this blow decoheres the filings. Now, when the Hertzian wave reaches the receiving station it rushes down to the coherer, the filings are welded together, the circuit is completed, and the instrument ticks off its dot. At this instant the relay instrument has also sent a current to the electro-magnet of the tapper. The magnet draws back the little hammer and lets it strike the coherer, the filings are separated, and the station is ready to receive at once the next flash.

Each succession of waves produce the same effect, and the operation is repeated, the result, being an intelligible series of dots and dashes which are readily translated into their proper meaning.

Messages by wireless telegraphy have already been sent with accuracy up to 110 miles, of which sixty were over water and the rest over land. Messages are not lost by the curvature of the earth, which is about 1,000 feet in eighty miles, and they work all right from a wire 130 feet high. Weather conditions cannot interfere, nor can the messages be stolen, for the reason that the transmitters and receivers must be

in "tune,"—that is, they must work in harmony. This makes it almost impossible for the receiver to take a message not intended for him.

The electric waves do not seem to be impeded by buildings or hills in the intervening space, for experiments have shown that messages sent to given destinations, between which and the sender were high hills, buildings, etc., have been accurately received. Whether the Hertzian waves go through or around the intercepting object has not yet been ascertained.

Quite Inexpensive.

The principal cost of installing a wireless telegraph plant is that of the poles, the receivers costing only about \$60. The expense of maintaining the electrical current is nominal. Each station has both a sending and a receiving instrument, one being turned off when the other is in operation. Messages can now be sent at the rate of twenty-five words a minute, so it may readily be seen that when the system is still more perfect, it may threaten the established telegraph lines. Imagine another Eiffel tower on this side of the Atlantic, with sending and receiving stations here and at Paris. The expense of laying and operating the great submarine cables would be entirely done away with.

Already the system is in use on lightships, connecting them with the lifesaving stations on shore, and many lives and much property have been saved by its use. What, then, if every ship or train had these instruments? Accidents might be avoided, news imparted without stopping, directions given for war vessels' manœuvres, and countless other similar uses. Marconi predicted that some of the greatest improvements in this line were yet to come. He devised a sort of reflector that concentrates the waves and shoots them in one direction, like a searchlight, so that they may be directed at will, and only to certain spots.

He also planned an arrangement that will tell from what direction a message comes. He thought it possible to arrange a set of senders and receivers and so manipulating them for subscribers that the news of the day can be telegraphed all over the country, thus doing away with newspapers.

AUTOMOBILES, MOTO-CARS AND OTHER AUTOMATIC VEHICLES.

Though the manufacture and use of self-propelling vehicles are yet in their infancy, the industry is growing to such an enormous size that it is taking in half the carriage and wagon factories in this country. For many years attempts have been made to solve the problem of propelling wagons, carriages and other vehicles along the highways without the use of rails to run upon, and by some such motive power as steam, compressed are or electricity.

By 1895 a few very expensive locomotive-like affairs had been turned out that operated with great fuss and feather, but were successful to the extent that large manufacturers employed skilled inventors to work out new ideas. In the last year of the century we had the industry growing to great size, and self-moving cars, wagons, trucks and carriages being used universally in the large cities, with the prospect of their invading the realm of the horse in the country before many years.

France took the lead in the use of these contrivances, and formed a fashionable automobile club numbering 1,700. An exposition was held in which 1,100 vehicles were shown, representing every sort and kind from a fashionable brougham to a milk-peddler's cart.

The motive power in most of these machines is gasoline or naphtha, while those England has been putting out run mostly by steam. It has been left to America, as in most other things, to bring forth the perfect electric carriage. And this latter kind seems to give better satisfaction than any other, by reason of its safety, endurance and speed, extensive orders from Europe being proof of acceptance of the American models abroad.

To be worthy of consideration, the modern motor vehicle, no matter what its method of propulsion, should be odorless almost noiseless, and free from jolting. Methods that are likely to result in explosions are being cast aside, and the weight of the motor, which is at present rather great, is being reduced as much as possible. Most of the carriages look odd to one seeing them for the first time, for, having no shafts or poles, they appear "bobbed" off in front.

They are also too high for self-propelled vehicles, but soon they will have more graceful outlines and by having smaller wheels and less gearing the body of the vehicle will be nearer the ground. Of course, when a horse was attached to draw the wagon, it was necessary that the wheels be high

enough so that the rider could see over the horse's back. And when these new methods for travel were first attempted, the carriage as it had been was made use of without much change in appearance.

In America, altogether there are six motive powers employed: electricity, steam, gasoline, compressed air, carbonic-acid gas and alcohol. The first three have been applied with success; the others are in their infancy, while the new power generator, liquid air, is expected to bring forth great power ere long, in a compact and very light form.

Motor on Wheels.

The electric mobile is the one in most common use in this country, and possibly has the combined qualities of being more rapid, cleaner, and more nearly "fool-proof" than any other. The method employed for its construction is similar to that used on any electrically-driven apparatus; namely, a strong motor attached to the wheels, and propelled by electricity from storage batteries carried on the vehicle. Such a motor is odorless, almost without vibration, and is practically noiseless. It can run with great speed, and climb almost any hill road so long as it is smooth. Of course, it is very heavy, owing to the use of storage batteries, and it can run only a certain distance without being recharged with electricity.

These batteries weigh from 500 to 1,500 pounds each, the vehicle weighing from 900 to 4,000 pounds. An ordinary lady's phaeton weighs about a ton, and carries a battery of 900 pounds. When the battery is empty it may be re-

charged again at electrical stations maintained for the purpose, after which the carriage is ready for its journey once more. The current not only operates the motor at the wheels, but also lights the lamps, rings the alarm gong, and, in cabs, actuates a push-button bell for communication between the passenger and driver.

Levers and Switches.

Aside from the device for supplying power to the wheels, there are numerous others for guiding and controlling the machine when it is under way. Near the seat of the driver are a number of switches and levers, which to one just learning how they operate are rather bewildering. In fact, schools are maintained where persons are taught how to manage these roadsters. In France a special highway is prepared with dummy figures in the path where the beginner is learning, the object being to become so proficient that none will be knocked down by the carriage running away.

The driver must keep his eyes wide open and both his feet and hands busy. With his left hand he grasps the power lever which controls the speed, while with the right he manages the steering lever. He has one heel all the time on an emergency switch that cuts off the current, and at the same time must ring a gong to warn people of the approach of his pneumatic-tired conveyance. With the other foot he manages a reversing-switch that will back the carriage, while with his toes he applies a quick brake. When he wishes to turn on the lights he presses a button under the seat. So it may be seen that he is rather busy, and can never go to sleep and let the old horse carry him home.

In all the large cities lines of these electric cabs have been established. Most of them run from twenty to thirty miles without new current. It is a simple matter to recharge the storage batteries. All that is necessary is to put in a plug connecting it with the generator, somewhat after the fashion of a bicycle pump. This may be done at almost any electrical plant, and in some places, Belgium for instance, regular posting stations are established, while coin-in-the-slot "pumps" wili soon be arranged on the corners of city streets where a broken-down battery may be refilled.

Successful Motor.

The gasoline motors are in some ways inferior to those run by electricity; though all the long-distance races in Europe have been made in vehicles thus propelled. This motor is lighter than the other kind and needs no recharging station, gasoline being procurable at any crossroads at a small price. On the other hand, these engines are not self-starting, a push on the piston rod being necessary, and then the carriage throbs under the motion of the machinery. The ins and outs of all the machinery must be thoroughly learned, and one really becomes an experienced engineer before he masters the art of guiding this sort of automobile.

When one has learned, however, he is master of the situation, for he may travel up to fifty miles an hour on smooth roads, and through mud and other difficulties at less speed, with the aid only of a can of gasoline.

The process of power generation by gasoline is very simple. It is known that this liquid mixed with certain quantities of air and confined will, when ignited, explode with violence. A cylinder is devised which admits this combination at one end, the gas is exploded at the proper time and drives out the piston rod, which in turn causes the flywheel to revolve, drawing the piston back to its old place once more, after which the operation is repeated.

Four Impulses.

Most of these engines operate under four cycles or impulses. During the first the vapor is drawn into the cylinder; during the second it is compressed by the return piston; during the third it is exploded, and in the fourth the products of the explosion are driven out, and the cylinder is ready for the new charge.

In most engines the explosion is caused by an electric spark, there being no fire on the vehicle. Owing to the heat generated by the explosions going on all the time, the machinery must be kept cool by being cased in water jackets. In some cases the spark is done away with by having the compression of the gasoline so great that it explodes of its own heat. Different devices are made for mixing the proper quantities of gasoline and air, and many improvements are going on in general to do away with odors, vibrations and the like.

The cost of owning and operating automobiles for a period of several years is really considerably less than that of horses and carriage, and especially is this true of the gasoline kind. Many of the gasoline vehicles will run 100 miles on a half-dollar's worth of liquid.

Steam engines have been used to some extent for both trucks and pleasure vehicles with success. For the latter, however, they are not as yet in the stage where they are desirable, there being a great deal of complicated machinery to run which requires a regularly licensed engineer; and then there is generally a puffing sound and escaping steam at the exhaust pipe. However, for traction engines, trucks, figure for traction engines, they have proved eminently successful, because of the ease with which fuel and water may be had.

As yet, compressed air is rather cumbersome to handle. One truck has been constructed which has a set of cylinders operated by this method somewhat after the style of steam. The compressed air is held in huge steel storage bottles or tubes, which are carried under the wagon. Difficulty has been had from the freezing of the valves when the air is turned on and escapes rapidly. This is because of the great reduction of the temperature about the pipes when the air expands and sucks up latent heat.

Keeping Up Heat.

To avoid this a system of hot-water pipes heated by a gasoline flame is a rranged, that keeps the valves from cooling too much. Because of the great weight of these trucks they have not been extensively used. However, improvements are being made daily. One inventor arranged a small gasoline engine that generates electricity in the front of a truck and stores it in batteries at the back. From these storage batteries the current is drawn which runs an electrical motor. This truck weighs, however, over 9,000 pounds, and when loaded about 25,000 pounds, making it a serious question for good pavements.

The uses to which automobiles are

put are numerous and varied. All sorts of pleasure vehicles are in use, together with cob and omnibus lines in competition with street car lines. A railway hand-car has been put in use, of the gasoline velocipede type, capable of carrying three persons at the rate of thirty-two miles an hour.

Fire Automobile.

The Parisian fire department uses an electric automobile the battery of which is only one-fifth the weight of the whole apparatus including the crew. It is capable of traveling four or five hours at the rate of twelve miles an hour. In other fire departments many of the light buggies of the chiefs and marshals are driven by electricity, and run from forty to fifty miles per day.

The post offices of several of the larger cities employ autowagons for delivering and picking up mail, while nearly all the great department stores use electric wagons exclusively in their delivery business. The War Department at Washington took official cognizance of the automobile by ordering several wagons for the Signal Corps, and ambulance and ammunition wagons complete the list.

It may readily be imagined what will be the outcome of these marvellous strides in perfecting self-propelling vehicles. It means better pavements and roads all over the country, and in the city, the noises from the harsh rumb ling of wheels and the crash of horses hoof will be replaced by the rapid swish of the pneumatic tires.

In the last year of the century capital to the amount of \$400,000,000 has been invested in the manufacture of these vehicles in New York, Chicago, Boston

and Philadelphia. Laws became necessary for their regulation. In France they must be licensed, and the driver must have a certificate of proficiency. Speed must not exceed 18½ miles an hour in open country, or 12½ miles in passing houses, while in narrow thor-

oughfares it must be reduced to walking pace. All sorts of names have been proposed for this style of vehicle, from "horseless wagon" to "self-propeller" and "autocar." It seems, however, that the French "automobile" has come to stay.

WONDERS OF THE ELECTRICAL WORLD.

Aside from such marvellous discoveries as the wireless telegraph, the X-rays and the uses to which electricity has been put as a motive power, many minor experiments have been made which are rapidly bringing this weird fluid nearer and nearer to our daily life, both for comfort and for money-making. The United States, as in most other things, is taking the lead in this important work. Daily we are shipping to Europe and the Orient motors and electrical storage outfits in great numbers.

While in many instances the American trolley system of street cars was fruitful of dangerous accidents, nevertheless it has been rapidly taken up in Europe. Electrical plows are installed on the larger farms, and lighting by electricity is almost universal. The success of using water power at Niagara and elsewhere for generating this force is remarkable, and the use of the tides about Manhattan Island, upon which New York City is situated, for this purpose has been advanced as tenable.

Telegraphing 100,000 Words an Hour.

In telegraphing many improvements have been made, among others being one system whereby the wires are attached to a sort of electrical typewriter, which, upon being operated, sets in motion a similar machine at the other

end. The benefit of this system is that the operator does not need to be acquainted with any particular method, any one who is able to spell being competent to work the machine.

Another invention in this line is a method of perforating strips of paper with a machine similar to a typewriter, and then placing these strips in the sending device, which transmits the messages at the rate of 100,000 words an hour. This is a marvellous speed, and where the time is saved is that a number of men can be set to work at one time perforating the strips before using the wire for sending. The benefit to be derived from such a system is that there would be a great saving in laying additional lines, for once the strips are prepared the sending occupies the line but a few moments.

Picture Telegraphy.

Sending pictures by wire has at last come so near to perfection that it is being used to some extent in detective work. The method used is called telepantography. By it an engraving or artist's sketch may be sent over almost any distance by common telegraph communication. If a picture is to be transmitted it must be first treated to a process similar to that for a half-tone engraving. A metal plate is made, very thin so that it may be bent round like

the cylinder of a phonograph. The plate is slipped on the transmitting machine, and a tiny needle on this device traces over all the lines in the metal plate, in this way sending impressions to a cylinder at the other end of the line, about which is wrapped a coil of paper. An inked needle at the receiving end traces the lines as they are telegraphed, and a complete reproduction of the original picture is the result.

Plants Grown by Electricity.

The qualities of electricity, though when in the form of lightning and strong direct currents readily take life, are such that in other forms as readily give life. Experiments have been made on seeds, and in one-half the time it takes Nature to turn out her work by ordinary processes, the application of electricity has brought out mature plants.

The first experiment was made on an egg that was being hatched. An electric current strong enough to kill a fowl did not destroy the germ of vitality, but the chicken when hatched was of most abnormal size and monstrous in shape. This proved, however, what might be done with this marvellous agent.

In plant stimulation the apparatus consists of two glass cylinders, a larger one about two inches in diameter for the larger seeds, and one about three-fourths of an inch for those of less size. Within these receptacles the seeds are placed, thoroughly moistened, and the openings closed with copper disks having wires attached. By these wires the disks are connected with the poles of an induction coil, and then the current is passed through the moist seeds, which are good conductors.

Quickest Method.

After this treatment the seeds are placed in germinating pans. consist of two plates one within the other, the inner being of porous clay. The seeds are sown between two sheets of filter paper, and water passing through the porous plate is absorbed by the paper, thus keeping the seeds moist at all times. The temperature is kept at about 48 degrees all the time by aid of electrical devices, and the growth of the plants is 30 per cent quicker by this method than otherwise, while, at the same time, many seeds not perfect enough to grow under ordinary climatic conditions are saved by this electrical treatment.

CHAPTER XXX.

Steam Navigation and Growth of the American Navy.

OATS propelled by steam—at first small and insignificant craft, but growing larger, swifter, more costly, more indispensable to the commerce of the world, finally culminating in the magnificent "ocean greyhound" that cleaves the waters with the speed of a locomotive, and the battleship, that grim defender of nations—such is the marvelous story of the application of steam to river and ocean navigation in the nineteenth century.

One of the great inventions of the early part of the century was the steamboat, with which is associated the name of that inventive genius, acute, resolute, undaunted in the face of defeat and never losing his sublime faith in his own discovery—Robert Fulton. Fulton's steamboat was the forerunner of the steamship Oceanic and the ocean liners that fly like shuttles, weaving continents together.

Several eminent and ingenious men, previous to this, had proposed to propel vessels by steam power, among whom were Dr. Papin, of France, Savery, the Marquis of Worcester, and Dr. John Allen, of London, in 1726. In 1786, Oliver Evans, of Philadelphia, and about the same time Dr. Franklin, proposed to accomplish this result by forcing a quantity of water, by means of steam power, through an opening made for that purpose in the stern of the hull of the boat.

In 1737, Jonathan Hulls issued a pamphlet proposing to construct a boat

to be moved by steam power, for the purpose of towing vessels out of harbors against tide and winds. In his plan the paddle-wheel was used, and was secured to a frame placed far out over the stern of the boat. It was given this position by the inventor because water fowls propelled themselves by pushing their feet behind them.

In 1787, Mr. James Rumsey, of Shepherdstown, Virginia, constructed and navigated the first steamboat in actual His boat was eighty feet in length, and was propelled by means of a vertical pump in the middle of the vessel, by which the water was drawn in at the bow and expelled at the stern through a horizontal trough in her hull. The engine weighed about onethird of a ton, and the boat had a capacity of about three tons burthen. Wher thus laden, a speed of about four miles an hour could be attained. The boiler held only five gallons of water, and needed but a pint at a time. Rumsey went to England to exhibit his plan on the Thames, and died there in 1793.

About the same time the Marquis de Joffrey launched a steamer one hundred feet long on the Loire, at Lyons, using paddles revolving on an endless chain, but only to find his experiment a failure.

In December, 1786, John Fitch published an account of a steamer with which he had made several experiments on the Delaware, at Philadelphia, and which came nearer to success than any thing that had at that time been invented.

Fitch was unfortunate in his affairs, and became so disheartened that he ceased to attempt to improve his invention, and finally committed suicide by drowning himself in the Alleghany River at Pittsburgh.

Advent of Fulton.

In 1787, Mr. Patrick Miller, of Dalwinston, Scotland, designed a double vessel, propelled by a wheel placed in the stern between the two keels. This boat is said to have been very successful, but it was very small, the cylinder being only four inches in diameter. In 1789, Mr. Miller produced a larger vessel on the same plan, which made seven miles per hour in the still water of the Forth and Clyde Canal, but it proved too weak for its machinery, which had to be taken out.

It was in the face of these failures that Fulton applied himself to the task of designing a successful steamboat. During his residence in Paris he had made the acquaintance of Mr. Robert R. Livingston, then the American minister in France, who had previously been connected with some unsuccessful steamboat experiments at home. Mr. Livingston was delighted to find a man of Fulton's mechanical genius so well satisfied of the practicability of steam navigation, and joined heartily with him in his efforts to prove his theories by experiments.

Several small working models made by Fulton convinced Mr. Livingston that the former had discovered and had overcome the cause of the failure of the experiments of other inventors, and it was finally agreed between them to build a large boat for trial on the Seine. This experimental steamer was furnished with paddle wheels, and was completed and launched early in the spring of 1803.

On the very morning appointed for the trial, Fulton was aroused from his sleep by a messenger from the boat, who rushed into his chamber, pale and breathless, exclaiming, "Oh, sir, the boat has broken in pieces and gone to the bottom!" Hastily dressing and hurrying to the spot, he found that the weight of the machinery had broken the boat in half and carried the whole structure to the bottom of the river.

Triumphant Success.

He at once set to work to raise the machinery, devoting twenty-four hours, without resting or eating, to the undertaking, and succeeded in doing so, but inflicted upon his constitution a strain from which he never entirely recovered. The machinery was very slightly damaged, but it was necessary to rebuild the boat entirely. This was accomplished by July of the same year, and the boat was tried in August with triumphant success, in the presence of the French National Institute and a vast crowd of the citizens of Paris.

This steamer was very defective, but still so great an improvement upon all that had preceded it, that Messrs. Fulton and Livingston determined to build one on a larger scale in the waters of New York, the right of navigating which by steam vessels had been secured by the latter as far back as 1798. The law which granted this right had been continued from time to time through Mr. Livingston's influence, and was finally amended so as to include Fulton within its provisions.

Having resolved to return home, Ful-

ton set out as soon as possible, stopping in England on his return, to order an engine for his boat from Watt and Boulton. He gave an exact description of the engine, which was built in strict accordance with his plan, but declined to state the use to which he intended putting it.

Inventors Ridiculed.

Very soon after his arrival in New York, he commenced building his first American boat, and finding that her cost would greatly exceed his estimate, he offered for sale a third interest in the monopoly of the navigation of the waters of New York, held by Livingston and himself, in order to raise money to build the boat, and thus lighten the burdens of himself and his partner, but he could find no one willing to risk money in such a scheme. Indeed, steam navigation was universally regarded in America as a mere chimera, and Fulton and Livingston were ridiculed for their faith in it.

The bill granting the monopoly held by Livingston was regarded as so utterly absurd by the Legislature of New York, that that wise body could with difficulty be induced to consider it seriously. Even among scientific men the project was considered impracticable.

All agreed in pronouncing Fulton's scheme impracticable; but he went on with his work, his boat attracting no less attention and exciting no less ridicule than the ark had received from the scoffers in the days of Noah. The steam-engine ordered from Boulton and Watt was received in the latter part of 1806; and in the following spring the boat was launched from the

ship-yard of Charles Brown on the East River. Fulton named her the Clermont, after the country-seat of his friend and partner, Chancellor Livingston.

She was one hundred and sixty tons burthren, one hundred and thirty feet long, eighteen feet wide, and seven feet deep. Her engine was made with a single cylinder, two feet in diameter, and of four feet stroke; and her boiler was twenty feet long, seven feet deep, and eight feet broad. The diameter of the paddle-wheels was fifteen feet, the boards four feet long, and dipping two feet in the water. The boat was completed about the last of August, and she was moved by her machinery from the East River into the Hudson, and over to the Jersey shore.

Expected Another Failure.

This trial, brief as it was, satisfied Fulton of its success, and he announced that in a few days the steamer would sail from New York for Albany. A few friends, including several scientific men and mechanics, were invited to take passage in the boat, to witness her performance; and they accepted the invitation with a general conviction that they were to do but little more than witness another failure.

Monday, September 10, 1807, came at length, and a vast crowd assembled along the shore of the North River to witness the starting. As the hour for sailing drew near, the crowd increased, and jokes were passed on all sides at the expense of the inventor, who paid little attention to them, however, but busied himself in making a final and close inspection of the machinery.

Says Fulton, "The morning I left

New York, there were not, perhaps, thirty persons in the city who believed that the boat would ever move one mile per hour, or be of the least utility; and while we were putting off from the wharf, which was crowded with spectators, I heard a number of sarcastic remarks."

Ready to Start.

One o'clock, the hour for sailing, came, and expectation was at its highest. The friends of the inventor were in a state of feverish anxiety lest the enterprise should come to grief, and the scoffers on the wharf were all ready to give vent to their shouts of derision. Precisely as the hour struck, the moorings were thrown off, and the "Clermont" moved slowly out into the stream. Volumes of smoke and sparks from her furnaces, which were fed with pine wood, rushed forth from her chimney, and her wheels, which were uncovered, scattered the spray far behind her. The spectacle she presented as she moved out gradually from her dock was certainly novel to the people of those days, and the crowd on the wharf broke into shouts of ridicule.

Soon, however, the jeers grew silent, for it was seen that the steamer was by degrees increasing her speed. In a little while she was fairly under weigh, and making a steady progress up the stream at the rate of five miles per hour. The incredulity of the spectators had been succeeded by astonishment, and now this feeling gave way to undisguised delight, and cheer after cheer went up from the vast throng. Many people followed the boat for some distance up the river shore. In a little while, however, the boat was observed

to stop, and the enthusiasm of the people on the shore at once subsided. The scoffers were again in their glory, and unhesitatingly pronounced the boat a failure.

Their chagrin may be imagined when, after a short delay, the steamer once more proceeded on her way, and this time even more rapidly than before. Fulton had discovered that the paddles were too long, and took too deep a hold on the water, and had stopped the boat for the purpose of shortening them.

To Albany and Back.

Having remedied this defect, the Clermont continued her voyage during the rest of the day and all night, without stopping, and at one o'clock the next day ran alongside the landing at Clermont, the seat of Chancellor Livingston. She lay there until nine the next morning, when she continued her voyage toward Albany, reaching that city at five in the afternoon, having made the entire distance between New York and Albany (one hundred and fifty miles) in thirty-two hours of actual running time, an average speed of nearly five miles per hour. On her return trip, she reached New York in thirty hours running time—exactly five miles per hour. Fulton states that during both trips he encountered a head wind.

The river was at this time navigated entirely with sailing vessels, and large numbers of these were encountered by the Clermont during her up and down trips. The surprise and dismay excited among the crews of these vessels by the appearance of the steamer was extreme. These simple people, the majority of whom had heard nothing of Fulton's experiments, beheld what

they supposed to be a huge monster, vomiting fire and smoke from its throat, 'ashing the water with its fins, and shaking the river with its roar, approaching rapidly in the very face of both wind and tide.

Amusing Terror.

Some threw themselves flat on the decks of their vessels, where they remained in an agony of terror until the monster had passed, while others took to their boats and made for the shore in dismay, leaving their vessels to drift helplessly down the stream. Nor was this terror confined to the sailors. The people dwelling along the shore crowded the banks to gaze upon the steamer as she passed by. A former resident of the neighborhood of Poughkeepsie thus describes the scene at that place, which will serve as a specimen of the conduct of the people along the entire river below Albany:

"It was in the early autumn of the year 1807 that a knot of villagers was gathered on a high bluff just opposite Poughkeepsie, on the west bank of the Hudson, attracted by the appearance of a strange, dark-looking craft, which was slowly making its way up the river. Some imagined it to be a sea-monster, while others did not hesitate to express their belief that it was a sign of the approaching judgment.

"What seemed strange in the vessel was the substitution of lofty and straight black smoke-pipes, rising from the deck, instead of the gracefully tapered masts that commonly stood on the vessels navigating the stream, and, in place of the spars and rigging, the curious play of the working-beam and pistons, and the slow turning and splashing of the

huge and naked paddle-wheels, met the astonished gaze. The dense clouds of smoke, as they rose wave upon wave, added still more to the wonderment of the rustics.

"This strange-looking craft was the Clermont on her trial trip to Albany; and of the little knot of villagers mentioned above, the writer, then a boy in his eighth year, with his parents, formed a part. I well remember the scene, one so well fitted to impress a lasting picture upon the mind of a child accustomed to watch the vessels that passed up and down the river.

Intense Curiosity.

"The forms of four persons were distinctly visible on the deck as she passed the bluff—one of whom, doubtless, was Robert Fulton, who had on board with him all the cherished hopes of years, the most precious cargo the wonderful boat could carry.

"On her return trip, the curiosity she excited was scarcely less intense. The whole country talked of nothing but the sea-monster, belching forth fire and smoke. The fishermen became terrified, and rowed homewards, and they saw nothing but destruction devastating their fishing-grounds; while the wreaths of black vapor, and rushing noise of the paddle-wheels, foaming with the stirred-up waters, produced great excitement among the boatmen, which continued without abatement, until the character of that curious boat, and the nature of the enterprise which she was pioneering, had been understood."

The alarm of the sailors and dwellers on the river shore disappeared as the character of the steamer became better

known; but when it was found that the Clermont was to run regularly between New York and Albany, as a packetboat, she became the object of the most intense hatred on the part of the boatmen on the river, who feared that she would entirely destroy their business. In many quarters Fulton and his invention were denounced as baneful to society, and frequent attempts were made by captains of sailing vessels to sink the Clermont by running into her. She was several times damaged in this way, and the hostility of the boatmen became so great that it was necessary for the Legislature of New York to pass a law declaring combinations to destroy her, or willful attempts to injure her, public offenses punishable by fine and imprisoument.

Made Regular Trips.

It had been supposed that Fulton's object was to produce a steamer capable of navigating the Mississippi River, and much surprise was occasioned by the announcement that the Clermont was to be permanently employed upon the Hudson. She continued to ply regularly between New York and Albany until the close of navigation for that season, always carrying a full complement of passengers, and more or less freight.

During the winter she was overhauled and enlarged, and her speed improved. In the spring of 1808 she resumed her regular trips, and since then steam navigation on the Hudson has not ceased for a single day, except during the closing of the river by ice.

In 1811 and 1812, Fulton built two steam ferry-boats for the North River, and soon after added a third for the East

River. These boats were the beginning of the magnificent steam ferry system which is to-day one of the chief wonders of New York. They were what are called twin-boats, each of them consisting of two complete hulls, united by a deck or bridge. They were sharp at both ends, and moved equally well with either end foremost, so that they could cross and recross without being turned around.

Floating Dock.

These boats were given engines of sufficient power to enable them to overcome the force of strong ebb tides; and in order to facilitate their landing, Fulton contrived a species of floating dock, and a means of decreasing the shock caused by the striking of the boat against the dock. These boats could accommodate eight four-wheel carriages, twentynine horses, and four hundred passengers. Their average time across the North River, a mile and a half wide, was twenty minutes.

The introduction of the steamboat gave a powerful impetus to the internal commerce of the Union. It opened to navigation many important rivers (whose swift currents had closed them to sailing craft), and made rapid and easy communication between the most distant parts of the country practicable. The public soon began to appreciate this, and orders came in rapidly for steamboats for various parts of the country. Fulton executed these as fast as possible, and among the number several for boats for the Ohio and Mississippi Rivers.

Early in 1814, the city of New York was seriously menaced with an attack from the British fleet, and Fulton was

called on by a committee of citizens to furnish a plan for a means of defending the harbor. He exhibited to the committee his plans for a vessel of war to be propelled by steam, capable of carrying a strong battery, with furnaces for red-hot shot, and which, he represented, would move at the rate of four miles an hour. These plans were also submitted to a number of naval officials, among whom were Commodore Decatur, Captain Jones, Captain Evans, Captain Biddle, Commodore Perry, Captain Warrington, and Captain Lewis, all of whom warmly united in urging the Government to undertake the construction of the proposed steamer.

Floating Batteries.

The citizens of New York offered, if the Government would employ and pay for her after she was built, to advance the sum (\$320,000) necessary for her construction. The subject was vigorously pressed, and in March, 1814, Congress authorized the building of one or more floating batteries after the plan presented by Fulton. Her keel was laid on the 20th of June, 1814, and on the 31st of October, of the same year, she was launched, amid great rejoicings, from the ship-yard of Adam and Noah Brown.

In May, 1815, her engines were put on board, and on the 4th of July of that year she made a trial trip to Sandy Hook and back, accomplishing the round trip—a distance of fifty-three miles—in eight hours and twenty minutes, under steam alone. Before this, however, peace had been proclaimed, and Fulton had gone to rest from his labors.

The ship was a complete success, and

was the first steam vessel of war ever built. She was called the Fulton the First, and was for many years used as the receiving ship at the Brooklyn Navy Yard. She was an awkward and unwieldy mass, but was regarded as the most formidable vessel afloat; and as the pioneer of the splendid war steamers of to-day was an object of great interest. The English regarded her with especial uneasiness, and put in circulation the most marvellous stories concerning her. One of these is taken from a treatise on steam navigation published in Scotland at this period, the author of which assures his readers that he has taken the utmost pains to obtain full and accurate information respecting the American war steamer. His description is as follows:

A Huge Monster.

"Length on deck three hundred feet, breadth two hundred feet, thickness of her sides, thirteen feet, of alternate oak plank and corkwood; carries forty-four guns, four of which are 100-pounders, quarter-deck and forecastle guns, 44pounders; and further, to annoy an enemy attempting to board, can discharge one hundred gallons of boiling water in a minute, and by mechanism brandishes three hundred cutlasses, with the utmost regularity, over her gunwales; works almost an equal number of heavy iron pikes of great length, darting them from her sides with prodigious force, and withdrawing them every quarter of a minute!"

Fulton followed up the Clermont, in 1807, with a larger boat, called the Car of Neptune, which was placed on the Albany route as soon as completed. The Legislature of New York had en-

acted a law, immediately upon his first success, giving to Livingston and himself the exclusive right to navigate the waters of the State by steam, for five years for every additional boat they should build in the State, provided the term should not exceed thirty years.

In the following year the Legislature passed another act, confirmatory of the prior grants, and giving new remedies to the grantees for any invasion of them, and subjecting to forfeiture any vessel propelled by steam which should enter the waters of the State without their license. In 1809 Fulton obtained his first patent from the United States; and in 1811 he took out a second patent for some improvement in his boats and machinery. His patents were limited to the simple means of adapting paddle wheels to the axle of the crank of Watt's engine.

Robert Fulton was born in Little Britain, Lancaster County, Pennsylvania, in 1765. Though others had previously conceived the idea of steam navigation, he is admitted to have been the first who successfully realized it. All the brilliant successes attending human mastery of the seas can be traced directly to his practical inventions and mechanical genius. In the days of mythology he would have been denominated Neptune, the ruler of the deep.

Fulton's invention gave a powerful impulse to the internal commerce of the United States and aided greatly in opening up the vast regions adjacent to the Mississippi River and our other great waterways. Its value cannot be estimated and it is impossible to conceive of any invention that could have been fraught with greater practical benefits. Capitalists were very quick to see the vast opportunities thus thrown in their way and it was not long before untold millions of dollars were invested in various enterprises that we should never have heard of except for Fulton's discovery.

OCEAN STEAMERS AND BATTLESHIPS.

After Fulton's steamboats began to navigate the Hudson it was not to be expected that shipbuilders would be satisfied until they had constructed vessels that could cross the ocean by the aid of steam power. In 1819, the first vessel to do this sailed from the city of Savannah, Ga., and reached Liverpool in 28 days by the combined aid of wind and steam. The ship bore the name of the city from which she sailed.

The first vessel to cross by steam power alone was the Royal William, built in Canada; this voyage was accomplished in 1833. The first ocean steamer built of iron was the Great

Britain, 322 feet in length by 31 feet in the beam. It required fifteen days for this ship to cross the ocean, and this, in 1835, was considered remarkably fast time.

Every year improvements have been made in the size, speed and superb appointments of ocean steamers, until in the last part of the century it required but little over five days for a first-class steamship to make the voyage between New York and Liverpool. The difference between the first steam vessels that carried passengers across the ocean and the floating palaces on which the myriads of travellers now make the

trip across the sea, is almost inconceivable. All the comforts and luxuries of a first-class hotel are with you on the water, and the great rivalry between the various lines of steamships is constantly giving rise to new conveniences and better facilities.

For many years the Great Eastern was the largest steamship that had been floated. It was considered a marvel in its day, but as it failed to pay expenses when engaged in passenger traffic, it found its mission in laying cables between this country and Europe. Having done this, it was broken up and passed into the limbo of old iron.

Largest Steamship.

All things considered, the largest steamship ever built is the great Oceanica. The length of this monarch of the seas is 704 feet, and her displacement is 28,000 tons. She made her first voyage in 1899, and is capable of steaming around the world at the rate of twelve knots an hour without recoaling. It would be impossible to give any description of her powerful engines and vast carrying capacity that would convey to the mind any adequate idea of this marvel of naval construction.

Place the Oceanica beside the crude little Clermont, built by Fulton, and you see what the century has accomplished in steam navigation.

A marvel of naval construction is the modern battleship. Paul Jones fought his famous battle with old, bulky, unwieldy sailing vessels. Commodore Perry had ships almost as incapable in his great battle on Lake Erie. At the end of the century, steam war-snips that were nothing less than floating batteries, equipped with the most ingeni-

ous and the most terrible appliances for destruction, made the navies of the world so many monsters of death. Man's ingenuity was scarcely more conspicuous in any department of invention during the century than in the engines constructed for destroying human life.

Our Early Navy.

The navy of the United States has always held a warm place in the hearts of our countrymen. In the early revolutionary days Captain Jeremiah O'Brien, in a lightly manned and nameless sloop, chased and captured off the coast of Maine the British war-schooner Margaretta, armed with four light guns and fourteen swivel pieces. Cooper called this engagement the Lexington of the sea, for, like that celebrated skirmish, fought a scant three weeks before, it was a rising of the people against a regular force, and was characterized by a long struggle and a triumph.

Soon after General Washington assumed command of the army before . Boston he issued commissions to different vessels, and gave their commanders instructions to cruise about Massachusetts Bay, and to intercept British transports and storeships. Captain John Manly of Marblehead was the first to get away, in the schooner Lee. Although it may not be strictly true to term the Lee and other small cruisers similarly employed, the first vessels that ever belonged to the general government, they may be deemed the first that ever actually sailed with authority to cruise in behalf of the entire republic.

On the 13th of October, 1775, the nucleus of our national fleet was established by an act of Congress for the

equipment of several vessels. The reign of law had come.

From this little beginning has our navy of to-day grown; and from its first commodore; Esek Hopkins, a long line of heroes, brave men and true, have made the navy of the United States the wonder and admiration of the world. John Paul Jones, Hull, Decatur, Mc-Donough, Perry, Bainbridge, Preble, Lawrence, Farragut, Porter, and others who have gone to their rest, carried "Old Glory" to victory after victory to make this country and its people free; and then our Dewey, our Sampson, and Schley added further lustre to the flag while driving the Spaniard from this American continent forever.

Grand "Old Ironsides."

The first of the glorious victories which revealed to the eyes of the world American prowess on the high seas was the capture of the frigate Guerriere. thirty-eight guns, Captain Dacre, by the Constitution ("Old Ironsides"), forty-four guns, Captain Hull. The action was begun at 5 P. M. on August 19th by the Guerriere, which surrendered at 7 P. M. after a gallant fight and the loss of seventy-nine killed and disabled. The American loss was seven killed and seven wounded. Americans were greatly elated by the victory, and public enthusiasm for the navy was excited to the highest pitch.

During the war of 1812, when the Constitution was being chased by eleven vessels of the enemy, she managed, by the vigilant seamanship of Commander Hull, to escape in a steady and man-of-war-like style. In this affair the ship, no less than those who worked her, gained a high reputation.

The glories of this occasion are described in the quotation of one stanza from an old rhyme. It is a fair sample of the maritime ballads of the day.

"'Neath Hull's command, with a tough band And nought beside to back her, Before a day, as log-books say,

A fleet bore down to thwack her.

A fleet, you know, is odds or so
Against a single ship, sirs;

So₁ 'cross the tide, her legs she tried,'
And gave the rogues the slip, sirs.''

Splendid Line Ships.

The most picturesque vessels in history were the noble ships of the line. They give an idea of force, beyond any other type which preceded them, and presented a superb spectacle at anchor or when striving before a general action for that weathergage which was deemed the key of battle.

The Constitution, which was the finest of her time, was built in 1797. To-day she owns and deserves of all ships the warmest corner in the heart of the American people.

The steam sloop of war Kearsage, a type of war vessel that came out in 1859, had conferred upon her an undying reputation by her memorable victory over the Alabama. The Kearsarge was wrecked in 1894 in the West Indies.

In 1854, when the superiority of the screw was recognized, Congress authorized the construction of the famous class of which the Hartford was a type. The Hartford was the celebrated flagship of Admiral Farragut, and she is dear to all who appreciate the battle work of our ships and sailors. By special provision of Congress, the Hartford was put in a thorough state of repair, and will be kept on the navy

list as a cruiser for many years to come.

The necessities of the Civil War forced the United States into new naval construction. The fortunes of war in the famous fight with the Merrimac made the Monitor, a new type of war vessel designed by Ericsson and commanded by Captain John L. Worden, the best known. It revolutionized the naval architecture of the world and began the era of iron battleships. Monitor was lost off Hatteras in a storm, soon after her splendid victory.

Admiral Dewey's Flagship.

The Olympia, the flagship of Admiral Dewey, has a much greater military value than any other vessel of the protected cruiser class that preceded her. This was fully demonstrated at the most remarkable naval fight the world has ever seen—the battle of Manila.

Among the notable fast cruisers of the modern type is the steel-armored ship New York, the flag-ship of Admiral Sampson, in Cuban waters. The New York is a twin ship to the Brooklyn, but of slightly less tonnage; her speed, battery, and cost are the same. She had her baptism of blood at the bombardment of San Juan. Her qualities as a fighter are undisputed.

The two Brooklyns are examples of the variant types developed during the last third of the century. The new Brooklyn was Commodore Schley's flagship of the Flying Squadron at the naval battle of Santiago. The old Brooklyn was a steam frigate of twenty-five guns, and did good service in the Civil

The new Brooklyn is a twin screw cruiser of 9,271 tons; speed, 21 knots: | graboat class. Twin screw; 1,700 tons;

battery, eight 8-inch breech-loaders, twelve 6-pounders, four 1-pounder rapidfire, and four Gatling guns. Cost, \$2,-986,000, 40 officers, 501 men.

The reader will be surprised at the immense cost of our great battleships, which runs up into millions of dollars. The cost of one of our giant floating batteries would have provided a formidable fleet of the style of warships in use in the early part of the century.

The Famous Oregon.

The Oregon which made without mishap the memorable and unrivalled voyage of 14,000 miles from San Francisco to join Admiral Sampson's fleet, is known as a sea-going coast-line battleship. The Massachusetts and Indiana are of the same type.

The Oregon's armament consists of four 13-inch, eight 8-inch, and four 6inch breech-loading steel rifles; and a secondary battery of twenty rapid-fire guns, four machine guns, and seven torpedo tubes. She has 34 officers, 434 men and cost \$3,180,000.

The second-class battleship Maine went into commission in 1895, and two and a half years later, while under the command of Captain Sigsbee, entered Havana harbor on a friendly visit. She was destroyed while there by an explosion, February 15, 1898, and 264 of her officers and men lost their lives. The Maine was a fine ship of seventeen and a half knots speed, and cost \$2,500,000.

The Raleigh, a second-class protected cruiser, participated in the famous battle of Manila under Admiral Dewey, and distinguished herself in that glorious contest.

The Concord is a type of the torpedo-

and 16 knots speed. Her battery, six 6-inch breech-loading rifles; two 6-pounder, two 3-pounder, and one 1-pounder rapid-fire guns; two Hotchkiss, and two Gatling guns; 14 officers, 178 men; cost \$490,000. The Concord had the good fortune to be one of Dewey's fleet at Manila bay fight, May 1, 1898, and distinguished herself as a fine representative of her class.

The Swift Columbia.

It is pertinent to ask if the United States Government turned out in the protected cruiser Columbia only a racing machine. When the Columbia finished her memorable run from Southampton to New York in 6 days, 23 hours, 49 minutes, the great expectations of her speed and endurance were realized, and the triumph of the pirate, or commerce destroyer, as she was sometimes named, was made an occasion of national rejoicing. Her length is 412 feet; horsepower, 21,000; tonnage, at 8,000. Her armament consists of one 8-inch and two 6-inch breech-loading, eight 4-inch

rapid-fire rifles, twelve 6 pounder and four 1-pounder rapid-fire guns, and four Gatlings. She cost \$2,725,000.

The Minneapolis is, as nearly as possible, a sister ship of the Columbia; the main difference being that the latter has four funnels. The Minneapolis, as well as the Columbia, is a triple screw, protected cruiser, and was designated to be a commerce destroyer. During the war with Spain she was used as a scout to guard our coast from attack by hostile vessels, and to keep the commanders of our fleets informed as to the movements of the enemy.

It would be impossible within the limits of this work to describe all the vessels of our formidable American Navy. The foregoing are representatives of their various classes, and show the amazing evolution in our fighting sea-craft during the Nineteenth Century.

These ships are conspicuous triumphs of the inventive genius of the century in the application of steam to ocean navigation and the naval defense of nations.

CHAPTER XXXI.

Elias Howe's Sewing Machine.

OR a long time there stood in a window at the junction of Broadway and Fourth street, in New York City, a curious machine which attracted the gaze of thousands who passed by. This machine, clumsy and odd-looking as it was, nevertheless had a history which made it one of the most interesting of all the sights of the great city. It was the first sewing machine that was ever made.

Elias Howe, its maker, was born in the town of Spencer, Massachusetts, in 1819. He was one of eight children, and it was no small undertaking on the part of his father to provide a maintenance for such a household. Mr. Howe, Sr., was a farmer and a miller, and, as was the custom at that time in the country towns of New England, carried on in his family some of those minor branches of industry suited to the capacity of children, with which New England abounds. When Elias was six years old, he was set, with his brothers and sisters, to sticking wire teeth through the leather straps used for making cotton cards.

When he became old enough he assisted his father in his saw-mill and grist-mill, and during the winter months picked up a meager education at the district school. He said that it was the rude and imperfect mills of his father that first turned his attention to machinery. He was not fit for hard work, however, as he was frail in constitution and incapable of bearing much fatigue.

Moreover, he inherited a species of lameness which proved a great obstacle to any undertaking on his part, and gave him no little trouble all through life. At the age of eleven he went to live out on the farm of a neighbor, but the labor proving too severe for him, he returned home, where he remained until he was sixteen years old.

Seeking His Fortune.

When at this age, he conceived an ardent desire to go to Lowell to seek his fortune. One of his friends had just returned from that place, and had given him such a wonderful description of the city and its huge mills, that he was eager to go there and see the marvel for himself. Obtaining his father's consent, he went to Lowell, and found employment as a learner in one of the large cotton mills of the city. He remained there two years, when the great financial disaster of 1837 threw him out of employment.

He obtained a place at Cambridge, in a machine shop, and was put to work upon the new hemp-carding machinery of Professor Treadwell. His cousin, Nathaniel P. Banks, afterward governor of Massachusetts, member of Congress, and major-general, worked in the same shop with him and boarded at the same house. Howe remained in Cambridge only a few months, however, and was then given a place in the machine shop of Ari Davis, of Boston.

At the age of twenty-one he married.

This was a rash step for him, as his health was very delicate, and his earnings were but nine dollars per week. Three children were born to him in quick succession, and he found it no easy task to provide food, shelter, and clothing for his little family. The light-heartedness for which he had formerly been noted entirely deserted him and he became sad and melancholy.

Hopeless Poverty.

His health did not improve, and it was with difficulty that he could perform his daily task. His strength was so slight that he would frequently return home from his day's work too much exhausted to eat. He could only go to bed, and in his agony he wished "to lie in bed forever and ever." Still he worked faithfully and conscientiously, for his wife and children were very dear to him; but he did so with a hopelessness which only those who have tasted the depths of poverty can understand.

About this time he heard it said that the great necessity of the age was a machine for doing sewing. mense amount of fatigue incurred and the delay in hand-sewing were obvious, and it was conceded by all who thought of the matter at all that the man who could invent a machine which would remove these difficulties would make a fortune. Howe's poverty inclined him to listen to these remarks with great interest. No man needed money more than he, and he was confident that his mechanical skill was of an order which made him as competent as any one else to achieve the task proposed.

He set to work to accomplish it, and, as he knew well the dangers which surble constructed a rough model of his

round an inventor, kept his own counsel. At his daily labor, in all his waking hours, and even in his dreams, he brooded over this invention. He spent many a wakeful night in these meditations, and his health was far from being benefited by this severe mental application. Success is not easily won in any great undertaking, and Elias Howe found that he had entered upon a task which required the greatest patience, perseverance, energy, and hopefulness. He watched his wife as she sewed, and his first effort was to devise a machine which should do what she was doing.

Success at Last.

He made a needle pointed at both ends, with the eye in the middle, that should work up and down through the cloth, and carry the thread through at each thrust; but his elaboration of this conception would not work satisfactorily. It was not until 1844, fully a year after he began the attempt to invent the machine, that he came to the conclusion that the movement of a machine need not of necessity be an imitation of the performance of the hand. It was plain to him that there must be another stitch, and that if he could discover it his difficulties would all be ended.

A little later he conceived the idea of using two threads, and forming a stitch by the aid of a shuttle and a curved needle with the eye near the point. This was the triumph of his skill. He had now invented a perfect sewing-machine, and had discovered the essential principles of every subsequent modification of his conception. Satisfied that he had at length solved the problem, he constructed a rough model of his

machine of wood and wire, in October, 1844, and operated to his perfect satisfaction. His invention is thus described:

Curious Needle.

"He used a needle and a shuttle of novel construction, and combined them with holding surfaces, feed mechanism and other devices, as they had never before been brought together in one machine. One of the principal features of Mr. Howe's invention is the combination of a grooved needle, having an eye near its point, and vibrating in the direction of its length, with a sidepointed shuttle for effecting a locked stitch, and forming, with the threads, one on each side of the cloth, a firm and lasting seam not easily ripped. The main action of the machine consists in the interlocking of the loop, made by the thread carried in the point of the needle through the cloth, with another thread passed through this loop by means of a shuttle entering and leaving it at every stitch.

"The thread attached to this shuttle remains in the loop and secures the stitch as the needle is withdrawn to be ready to make the next one. At the same time the cloth, held by little projecting pins to the baster plate, is carried along with this by what is called the 'feed motion' just the length of a stitch, the distance being readily adjusted for finer or coarser work. The cloth is held in a vertical position in the machine, and the part to be sewed is pressed against the side of the shuttlerace by a presser plate hinged on its upper edge, and capable of exerting any required pressure on the cloth, according as the adjusting screw that regulates it is

turned. "A slot, or perforation through this plate, also extended through the side of the shuttle-race near the bottom, admits the passage of the needle; and when this is pushed in the shuttle can still pass freely over it. The shuttle is pushed one way and then the other through its race or trough by picker staves. The thread for the needle is supplied by a bobbin, the movement of which is checked by a friction band, thus securing the proper tension, and the slack of the thread is duly taken up by a suitable contrivance for the purpose. Thus, all the essential features of the most approved sewingmachine were first found in that of Mr. Howe; and the machines of later date are, in fact, but modifications of it."

Poor, but Persevering.

At this time, he had abandoned his work as a journeyman mechanic, and had removed to his father's house. Mr. Howe, Sen., had established in Cambridge a machine-shop for the cutting of strips of palm-leaf used in the manufacture of hats. Elias and his family lived under his father's roof, and in the garret of the house the half-sick inventor put up a lathe, where he did a little work on his own account, and labored on his sewing-machine. He was miserably poor, and could scarcely earn enough to provide food for his family; and, to make matters worse, his father, who was disposed to help him, lost his shop and its contents by fire.

Poor Elias was in a most deplorable condition. He had his model in his head, and was fully satisfied of its excellence, but he had not the money to buy the materials needed in making a perfect machine, which would have to be constructed of steel and iron, and without which he could not hope to convince others of its value. His great invention was useless to him without the five hundred dollars which he needed in the construction of a working model.

Finds a Friend.

In this dilemma, he applied to a friend, Mr. George Fisher, a coal and wood merchant of Cambridge, who was a man of some means. He explained his invention to him, and succeeded in forming a partnership with him. Fisher agreed to take Howe and his family to board with him while the latter was making the machine, to allow his garret to be used as a workshop, and to advance the five hundred dollars necessary for the purchase of tools and the construction of a model. In return for this he was to receive one-half of the patent, if Howe succeeded in patenting his machine.

About the first of December, 1844, Howe and his family accordingly moved into Fisher's house, and the little workshop was set up in the garret. All that winter he worked on his model. There was little to delay him in its construction, as the conception was perfectly clear in his mind. He worked all day, and sometimes nearly all night, and in April, 1845, had his machine so far advanced that he sewed a seam with it. By the middle of May the machine was completed, and in July he sewed with it the seams of two woolen suits, one for himself and the other for Mr. Fisher. The sewing was so well done that it outlasted the cloth.

It has been stated by Professor Ren-

wick and other scientific men that Elias Howe "carried the invention of the sewing-machine further on toward its complete and final utility than any other inventor has ever brought a first-rate invention at the first trial. In truth, the curious machine at the corner of Broadway and Fourth street had in it all the essentials of the best sewing-machine ever constructed.

All Rejected It.

Having patented his machine, Howe endeavored to bring it into use. He was full of hope, and had no doubt that it would be adopted at once by those who were so much interested in the saving of labor. He first offered it to the tailors of Boston; but they, while admitting its usefulness, told him it would never be adopted by their trade, as it would ruin them. Considering the number of machines now used by the tailoring interest throughout the world, this assertion seems ridiculous.

Other efforts were equally unsuccessful. Every one admitted and praised the ingenuity of the machine, but no one would invest a dollar in it. Fisher became disgusted, and withdrew from his partnership, and Howe and his family moved back to his father's house. Thoroughly disheartened, he abandoned his machine. He then obtained a place as engineer on a railroad, and drove a locomotive until his health entirely broke down.

With the loss of his health his hopes revived, and he determined to seek in England the victory which he had failed to win here. Unable to go himself, he sent his machine by his brother Amasa, in October, 1846. Upon reach-

ing London, Amasa sought out Mr. William Thomas, of Cheapside, and explained to him his brother's invention. He found Mr. Thomas willing to use the machine in his business, but upon terms more favorable to himself than to the inventor.

He offered the sum of twelve hundred and fifty dollars for the machine which Amasa Howe had brought with him, and agreed to pay Elias fifteen dollars per week if he would enter his service, and adapt the machine to his business of umbrella and corset making. As this was his only hope of earning a livelihood, Elias accepted the offer, and, upon his brother's return to the United States, sailed for England. He remained in Mr. Thomas's employ for about eight months, and at the end of that time left him, baving found him hard, exacting, and unreasonable.

In Desperate Straits.

Meanwhile his sick wife and three children had joined him in London, and he had found it hard to provide for them on the wages given him by Mr. Thomas; but after being thrown out of employment his condition was desperate indeed. He was in a strange country, without friends or money, and often he and his little family went whole days without food. Their sufferings were very great, but at length Howe was able (probably by assistance from home) to send his family back to his father's house.

He himself remained in London, still hoping to bring his machine into use. It was in vain, however, and so, collecting what few household goods he had acquired in England, he shipped them to America, and followed them thither himself in another vessel, pawning his model and patent papers to pay his passage. When he landed in New York he had half a crown in his pocket, and there came to him on the same day a letter telling him that his wife was dying with consumption in Cambridge.

In Time to See Her Die.

He could not go to her at once, as he had no money, and was too feeble to undertake the distance on foot. He was compelled to wait several days until he could obtain the money for his fare to Cambridge, but at length succeeded in reaching that place just in time to see his wife die. In the midst of his grief he received the announcement that the vessel containing the few household goods which he had shipped from England had been lost at sea. It seemed to him that Fate was bent upon destroying him, so rapid and stunning were the blows she dealt him.

But a great success was now in store for him, and he was to rise out of his troubles to the realization of his brightest hopes. Soon after his return home he obtained profitable employment, and, better still, discovered that his machine had become famous during his absence. Fac-similes of it had been constructed by unscrupulous mechanics, who paid no attention to the patents of the inventor, and these copies had been exhibited in many places as "wonders," and had even been adopted in many important branches of manufacture.

Howe at once set to work to defend his rights. He found friends to aid him, and in August, 1850, began those famous suits which continued for four years, and were at length decided in his favor. His adversaries made a bold resistance, but the decision of Judge Sprague, in 1854, settled the matter, and triumphantly established the rights of the inventor.

In 1850, Howe removed to New York, and began in a small way to manufacture machines to order. He was in partnership with a Mr. Bliss, but for several years the business was so unimportant that upon the death of his partner, in 1855, he was enabled to buy out that gentleman's interest, and thus became the sole proprietor of his patent. Soon after this his business began to increase, and continued until his own proper profits and the royalty which the courts compelled other manufacturers to pay him for the use of his invention grew from \$300 to \$200,000 per annum. In 1867, when the extension of his patent expired, it is stated that he had earned a total of two millions of dollars by it. It cost him large sums to defend his rights, however, and he was very far from being as wealthy as was commonly supposed, although a very rich man.

In the Paris Exposition of 1867, he exhibited his machines, and received the gold medal of the Exposition, and the Cross of the Legion of Honor, in addition, as a compliment to him as a manufacturer and inventor.

He contributed money liberally to the aid of the Union in the Civil war, and enlisted as a private soldier in the Seventeenth Regiment of Connecticut Volunteers, with which command he went to the field, performing all the duties of his position until failing health compelled him to leave the service.

Upon one occasion the Government was so much embarrassed that it could not pay the regiment of which he was a member. Mr. Howe promptly advanced the money, and his comrades were saved from the annoyances which would have attended the delay in paying them. He died at Brooklyn, Long Island, on the 3rd of October, 1867.

Mr. Howe will always rank among the most distinguished of American inventors; not only because of the unusual degree of completeness shown in his first conception of the sewingmachine, but because of the great benefits which have sprung from it. It has revolutionized the industry of the world, opened new sources of wealth to enterprise, and lightened the labor of hundreds of thousands of working people. Many a pale-faced, hollow-eyed woman, who formerly sat sewing her life away for a mere pittance, blesses the name of Elias Howe, and there is scarcely a community in the civilized world but contains the evidence of his genius, and honors him as the benefactors of the human race.

CHAPTER XXXII.

Hoe's Lightning Printing Press.

O write the complete history of the printing press would require years of patient labor and research, and a much larger space than the limits of this present work will permit. There are few subjects more attractive or more worthy of consideration than the history of this wonderful invention, which seems more like a romance than a narration of facts.

The historian who should essay the task would be required to carry his reader back to the darkest ages of the world, and, beginning with the stamps used for affixing hieroglyphical characters to the now crumbling ruins of Egypt and Nineveh, trace the gradual development of the beneficent conception from the signets of the Israelites, and the stamps used by the Romans for marking certain kinds of merchandise, through the rude process of the Chinese, Japanese and Tartars, to the invention of Johannes Guttenberg, and, finally, to the wonderful lightning steam-presses of to-day.

In these pages it is not proposed to offer to the reader any such narrative. On the contrary, the story of the printing press will be taken up just as it was on the point of reaching its greatest perfection, since our subject concerns only the man and his invention whereby it was brought to that state.

This man, Richard March Hoe by name, was born in the city of New York, on the 12th of September, 1812. His father, Robert Hoe, was a native of

the village of Hose, Leicester, England, and the son of a wealthy farmer. Disliking his father's pursuit, he apprenticed himself to a carpenter. When only sixteen years old, the elder Hoe purchased his indentures from his master and he sailed for the United States.

Energetic Young Man.

Robert Hoe was almost penniless when he reached New York, and in this condition entered the store of Mr. Grant Thorburn one day in search of employment. Mr. Thorburn manifested a sudden and strong liking to the youtl., took him to his own house, and when he was prostrated with the yellow fever, during the epidemic of 1804, nursed him tenderly throughout. Setting to work immediately upon his arrival in New York, he made friends rapidly, and prospered in his trade so well that when but twenty years old he was able to marry. His bride was a daughter of Matthew Smith, of Westchester, and a sister of Peter Smith, the inventor of a hand printing press.

With this gentleman and Matthew Smith, Jr., his brother, Robert Hoe entered into partnership. Their business was that of carpentering and printers' joinery; but after Peter Smith had completed the invention of his hand press, it gradually grew into the manufacture of presses and printers' materials. Both brothers died in 1823 and Robert Hoe succeeded to the business.

The manufactory of Robert Hoe &

Co. was originally located in the centre of the old block between Pearl and William Streets, and Pine Street and Maiden Lane. Soon after their establishment there, the city authorities ran Cedar Street right through their building, and they removed to Gold Street, near John. They were twice burned out here, but continued to occupy these premises with their counting-room and lower shop.

Steam Presses.

Printing by steam had long attracted the attention of persons engaged in the art, and many essays had been made in this direction by different inventors, both in this country and in Europe. The most successful results were the Adams press, the invention of Mr. Isaac Adams, of Boston, Mass., and the Napier press, that of a British artisan. It was the latter which was the means of identifying Mr. Hoe with the steam press.

The Napier press was introduced into this country in 1830, by the proprietors of the National Intelligencer, but when it arrived these gentlemen were notable to release it from the Custom-house. Major Noah, himself the proprietor of a newspaper, was at that time collector of the port of New York, and he, being anxious to see the press in operation, requested Mr. Hoe to put it together. Mr. Hoe performed this task successfully, although the press was a novelty to him, and was permitted to take models of its various parts before it was reshipped to England. It was found to be a better press than any that had ever been seen in this country, and the Commercial Advertiser, of New York, and the Chronicle, of Philadelphia, at once ordered duplicates of it from England.

Mr. Hoe was very much pleased with this press, but believed that he could construct a much better one. To this end he despatched his new partner, Mr. Sereno Newton, to England to examine all the improvements in machinery there, and bring home samples of such as he thought might be advantageously adopted in this country. Mr. Newton, besides being an ingenious mechanic, was well-read in books, and was considered one of the first mathematicians in New York. Returning from his mission, he constructed a new twocylinder press, which soon superseded all others then in use. Mr. Hoe's health failed, compelling him, in 1832, to retire from the business.

Successful Inventor.

Young Richard M. Hoe had been brought up in his father's business, after receiving a fair education. He inherited his father's inventive genius, combined with a rare business capacity, and from the first was regarded as the future hope of the establishment. Upon the withdrawal of his father, a partnership was established between himself, his brother Robert, Mr. Newton, and his cousin, Matthew Smith, but the style of the firm remained unchanged.

Richard Hoe's first invention was conceived in 1837, and consisted of a valuable improvement in the manufacture of grinding saws. Having obtained a patent for it in the United States, he visited England in that year for the same purpose. By his process circular saws may be ground with accuracy to any desired thickness. He readily obtained a patent in England, as the excellence of his invention commended it to every one. While there he gave

especial attention to the improvements which had been made in the printing press, in the manufacture of which his firm was largely engaged.

Returning to New York, he devoted himself entirely to this branch of his business, and soon produced the machine known as Hoe's Double-Cylinder Press, which was capable of making about six thousands impressions per hour. The first press of this kind ever made was ordered by the New York Sun, and was the admiration of all the printers of the city. This style of press is now used extensively for printing country newspapers.

Demand for Speed.

As long as the newspaper interest of the country stood still, Hoe's Double-Cylinder Press was amply sufficient for its wants, but as the circulation of the journals of the large cities began to increase, the "double-cylinder" was often taxed far beyond its powers. A printing press capable of striking off papers with much greater rapidity was felt to be an imperative and still-increasing need. It was often necessary to hold the forms back until nearly daylight for the purpose of issuing the latest news, and in the hurry which ensued to get out the morning edition, the press very frequently met with accidents.

Mr. Hoe was fully alive to the importance of improving his press, and, in 1842, he began to experiment with it for the purpose of obtaining greater speed. It was a serious undertaking, however, and at every step fresh difficulties arose. He spent four years in experimenting, and at the end of that time was almost ready to confess that the obstacles were too great to be overcome.

One night, in 1846, while in this mood, he resumed his experiments. The more he pondered over the subject the more difficult it seemed. In despair, he was about to relinquish the effort for the night, when suddenly there flashed across his mind a plan for securing the type on a horizontal cylinder.

Solved in a Night.

This had been his great difficulty, and he now felt that he had mastered it. He sat up all night, working out his design, and making a note of every idea that occurred to him, in order that nothing should escape him. By morning the problem which had baffled him so long had been solved, and the magnificent "Lightning Press" already had a being in the inventor's fertile brain.

He carried his model rapidly to perfection, and, proceeding with it to Washington, obtained a patent. On his return home he met Mr. Swain, the proprietor of the Baltimore Sun and Philadelphia Ledger, and explained his invention to him. Mr. Swain was so much pleased with it that he at once ordered a four-cylinder press, which was completed and ready for use on the 31st of December, 1848. This press was capable of making ten thousand impressions per hour, and did its work with entire satisfaction in every respect.

This was a success absolutely unprecedented—so marked, in fact, that some persons were inclined to doubt it. The news flew rapidly from city to city, and across the ocean to foreign lands, and soon wherever a newspaper was printed men were talking of Hoe's wonderful invention. Orders came pouring in upon the inventor with such rapidity

that he soon had as many on hand as he could fill in several years. In a comparatively brief period the *Herald*, *Tribune*, and *Sun*, of New York, were boasting of their "Lightning Presses," and soon the *Traveller* and *Daily Journal*, in Boston, followed their example.

Immense Fortune.

Mr. Hoe was now not only a famous man, but possessed of an assured business for the future, which was certain to result in a large fortune. By the year 1860, besides supplying the principal cities of the Union (fifteen lightning presses being used in the city of New York alone), he had shipped eighteen presses to Great Britain, four to France, and one to Australia. Two of the presses sent to England were ordered for the London *Times*.

Mr. Hoe continued to improve his invention, adding additional cylinders as increased speed was desired, and at length brought it to the degree of perfection exhibited in the splendid tencylinder press that was used in the offices of leading journals, and struck off twenty-five thousand sheets per hour.

In 1858, Mr. Hoe purchased the patent rights and manufactory of Isaac Adams, in Boston, and carried on the manufacture of the Adams press from that place. He also established a manufactory in England, where he conducted a profitable business in both the Adams and the Hoe press. Over a million and a half of dollars were invested in these establishments in New York, Boston, and London, in land, buildings, and stock. The firm manufacture presses of all kinds, and all materials used by printers except type and ink.

The ten-cylinder press was sold at fifty thousand dollars, and was regarded as cheap at that immense sum. It is one of the most interesting inventions ever made. Those who have seen it working in the subterranean pressrooms of great journals will not soon forget the wonderful sight. The ear is deafened with the incessant clashing of the machinery; the printed sheets issue from the sides of the huge engine in an unceasing stream; the eye is bewildered with the mass of lines and bands; and it seems hard to realize that one single mind could ever have adjusted all the various parts to work harmoniously.

Rotary Printing.

Mr. Walter of the London *Times* is entitled to the honor of being instrumental in introducing the system of rotary printing for news-work, just as his father deserves that of having introduced steam machine-printing. The Walter press was soon adopted as the pattern of a number of machines constructed in Great Britain and abroad. Some of these machines much developed the idea of the Walter, and embodied fresh and important improvements.

In 1870, Messrs. George Duncan and Alexander Wilson, of Liverpool, brought out their "Victory" machine, which included the folding arrangement since added to the Walter press. By this apparatus, newspapers of various sizes are printed, folded, delivered and counted into quires or any portion required, at the rate of 200 per minute.

Since about 1870 the rotary system of printing has been gradually adopted in the offices of all newspapers having even moderately large circulations. Factories for producing rotary machines

have been established in various parts of England, while many such machines have been built in France, Germany and America.

The most improved and the fastest machines at the end of the century were those of Messrs. Hoe & Co., of New York and London. The most improved of these machines print four or six page papers at the extraordinary speed of 48,000 per hour or 800 per minute. Papers of eight, ten or twelve pages may be printed at a speed of 24,000 per hour,

and a sixteen page paper at 12,000 per hour. The papers can be pasted down the centre margins if required, and counted as delivered in quires of any number fixed upon. The machine delivers the papers, inset, pasted, cut top and bottom, turned out as compact as a pamphlet, and, by a device largely used in America, even folded and wrappered ready to post. This speed is effected by using a reel of paper of double width, about eight feet wide on which can be printed duplicate sets of plates.

CHAPTER XXXIII.

Miscellaneous Discoveries and Inventions.

ARLY in 1896 it was announced Professor Roentgen, that Wurzburg University, Germany, had discovered a method by which certain substances could be photographed, not merely showing the exterior surface, but also the interior substances. As the composition of the rays of light was unknown, these rays were designated by the algebraical term of X, meaning an unknown quantity. The discovery caused great interest throughout the world, and immediately experiments were begun in many places, especially by professors in medical schools.

It was soon ascertained that some parts of the human body, for example the hand, could be photographed and all solid substances beneath the flesh could be distinctly seen. In this way the bones of the hand are reproduced, and if there should be such a solid substance as a bullet of lead, it can be located and extracted. The importance of this discovery, especially to medical science, cannot be overestimated.

Experiments were carried on at Yale College with the following results: One of the professors laid a sensitive photographic plate horizontally in a wooden box, placed the object to be experimented with on top of the box, and suspended his Crookes tube above them both. He then turned on the electric current, which generated the newly discovered rays in the tube, which, in turn, threw them upon the objects below.

In the first experiment Mr. Bumstead used a leather pocketbook containing several coins. He thus photographed the coins, the rays going completely through the leather, the resistance of which was trifling compared with what it would have offered to light. He also photographed in the same way a pair of eyeglasses in their case. The result showed that the glasses were photographed, while the case was scarcely visible. A lead pencil showed an excellent picture of the lead, with the wooden portion dimly outlined.

Surprising Results.

A couple of English walnuts which had never been opened were exposed, and a splendid view of the kernels was obtained. All these exposures lasted about an hour. The experiments were carried on in open daylight, the plates, of course, being kept from the sun.

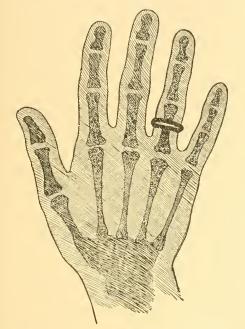
Probably the most interesting of Mr. Bumstead's experiments were those with animals. For this purpose he used a fish, a mouse and a frog. After the usual exposure the backbone of the fish was easily distinguishable.

The frog picture displayed a portion of the skeleton with more or less vividness, the plainest parts being the leg bones. The most distinct part of the mouse's skeleton was the skull, which could be traced with little difficulty. The little fleshy nose of the mouse did not give nearly as much resistance to the rays as the bone, and this fact was

the most useful result of the experi-

One experimenter relates the result as follows:

"My last attempt has resulted in giving me a perfect photograph. I used as a subject the leg of a man which had been fractured in a railroad acci-



PHOTOGRAPH OF HUMAN HAND SHOWING THE ANATOMY IN DETAIL.

dent two years ago. The fracture was in the upper third of the tibia, or, in other words, in the large bone of the leg a few inches above the knee. I placed an ordinary camera on one side of the leg and directly opposite on the other side of the member I placed the tube at a distance of three or four inches.

"The result was a clearly defined photograph. The bone appears rounded and not flat, as in the shadowgraphs heretofore produced. The fracture is perfectly plain. It can be traced all around the bone. The surface of hard-

ened lime salt, which forms after a fractured bone has been set, shows clearly.

"Then comes the most remarkable part of the photograph. Running down each side of the bone is a line showing the location of the marrow. The marrow is darker in the picture than the bone itself. Then, through the marrow a dark line can be seen, showing the mark of the fracture on the opposite side of the bone. In the centre of the bone are two spots, plainly discernible, showing the fibrous tissues of the nerves."

A standard medical journal comments as follows, upon the advantages of the discovery:

"As far as our present knowledge goes the positive advantages to medicine seem to be limited to three conditions: fractures, dislocations, and tumors of bones, encysted bullets, needles or pieces of glass in the tissues and earthy calculi.

"In the locating of bullets, some brilliant results have been already recorded, in which the bullet beyond the reach of touch or probe has been found by the X-ray and successfully removed."

One experiment at Berlin, Germany, located a needle in the stomach of a young woman which caused great irritation and incessant expectoration of blood. It was determined as a last resort to bring the patient to the Roentgen laboratory in the hope that the X-ray would locate the needle, and that it might be extracted without endangering the young woman's life.

The plate plainly showed every bone of the upper part of the body and the needle was found lying point downward in the lower right angle of the stomach.

Surgeons being present, it was resolved to remove the needle at once. The patient was placed under the influence of chloroform, and the cause of the excruciating sufferings which threatened her life, was taken from the stomach by skillful surgical manipulations.

The statement has been made that if, at the time President Garfield was felled by an assassin's pistol, this method of photography had been in use, the bullet could have been located and doubtless the life of the President could have been saved. The probes of the surgeons were of no avail; they were working in the dark. No such fatal result could have

happened if this new discovery had been known at that time. Its effects upon medical science are of the most marked and beneficial description.

The announcement has already been made that success has attended efforts to photograph the brain, thus locating tumors in that organ. In fact, the whole human body is surveyed and examined in all the workings of its wondrous mechanism. A photograph will tell the surgeon just what internal parts are diseased and will save all exploration with the knife. This, apart from the curiosity attending such a discovery, has led the scientific world to hail the new photography with delight.

DISCOVERY OF LIQUID AIR.

One of the most interesting discoveries in the realm of science in the latter part of the century was that of liquid air, the coldest substance known to man. It was long ago observed that when a gas was compressed so as greatly to reduce its volume, it became hot. This was called the heat of compression, and, strangely enough, was thought to be generated by the act of compression. It is now understood, however, that the rise in temperature is not caused by an increase in heat, but rather by the concentration of the manifest heat of a large volume into a small space.

Experiments that proved this also suggested that the discovery could be turned to profit by cooling the heated gas down while under pressure, and then allowing it again to expand to its original volume, which would make it fall greatly in temperature. It was soon learned that gas could be compressed and then cooled and allowed to expand until its temperature dropped 200 degrees.

For some time it had been held by scientists that air was a permanent gas, and could not be changed in its form, but gradually with experiments the idea arose that if air could be brought to a sufficiently low temperature it could be liquefied. All means known were used without success until, in 1877, Raoul Pictet submitted oxygen gas to an enormous pressure combined with intense cold. The result was a few drops of clear, bluish liquid that bubbled violently for a few moments, and then evaporated into the air again.

In 1892, a Polander named Olzewski succeeded in performing a similar experiment with nitrogen, the other constituent of air. And about the same time Professor Dewar, of England, not only performed both of these experiments, but also succeeded in producing a small quantity of air in a mushy form —in fact, air-ice.

The cost of this first ounce of liquid air was more than \$3,000. While being

a very interesting discovery for laboratory use, such a production and at such an expense was out of the question for commercial purposes. So it remained for Charles E. Tripler, of New York City, to invent a method whereby this wonderful agent can be brought forth with ease and at the cost of about twenty cents a gallon. He saw at once. upon the discovery that air could be liquefied, that it might be a great power generator, and accordingly commenced experiments to simplify the method for procuring it. He investigated the various means by which refrigeration was developed, such as the immense ammonia plants used in breweries and the like. The principle of cooling by expansion, he learned, was the basis to work upon, and the result of his studies was a simple and satisfactory system for producing this wonderful compound.

Its Practical Uses.

The uses and experiments to which this wonderful discovery may be placed are as odd and interesting as the method of its production. The following are a few of its uses:

It is eleven and one-half times as powerful as compressed air, and may be carried in a pasteboard box, while as much energy in compressed air would need the strongest steel cans. It may supplant some forms of fuel, for, when mixed with any form of carbon, it burns rapidly or explodes. Thus it may be used in interior combustion engines—for instance, the gas enginc. When a proper motor has been developed, it will no doubt be used to help solve the question of aerial navigation, for something that combines great power with

lightness seems to be the only reason why air-ships are not a complete reality.

The same may be said of sub-marine navigation. Here liquid air would supply the motive power, and the air for the crew to breathe as well, for a small quantity contains as much air as can be compressed into many great tanks. An automobile is now being made to run by this power. Deep-sea diving would also be aided by the use of casks of this air attached to the diving apparatus of the diver, thus doing away in a great measure with the pumps. mines where water is likely to rush in at any time, it might be used to freeze the surrounding earth, thus preventing great catastrophes.

A Perfect Vacuum.

In making such vacuum bulbs as those used for electric lights, liquid air would be very useful. After the air has been pumped out as much as possiple, the remainder can be frozen into a solid drop at one end, and then the bulb may be closed above it by an ordinary blow-pipe, thus giving an absolute vacuum. The most frightful explosions can be produced with the combination of combustibles and liquid air, for oxygen is necessary to combustion, and this air contains it in vast quantities. Physicians and surgeons sing the praises of this discovery, for by its aid a wound may be cauterized, or an excrescence "burned" away entirely.

Odd experiments, such as freezing a rose in all its color and loveliness, or reducing an egg to a frozen solid that when handled will break up into a thousand fragments and the yolk scatter as the pollen of a flower, show what may be done in the laboratory. When

a potato is frozen it becomes as hard as stone, and when fractured shows as beautiful a surface as ivory. Frozen butter may be pounded in a mortar until it is as fine as powder, and a raw beefsteak becomes pale and then breaks like petrified wood.

We have generally considered mercury and alcohol non-freezable, but when brought into contact with this queer liquid, mercury becomes as hard as rock, and alcohol a white, stringy substance like molasses candy. Steel in bars may be readily reduced to flame by dipping it in a glass of this air and lighting it.

Driven by Air.

Tripler succeeded in perfecting a machine by which he makes liquid air produce itself. And though it is scoffed at by scientists, who say something cannot be made from nothing, yet Tripler maintains that when his machine has once been cooled down he can make almost ten gallons of fresh supply with the use of but three gallous. If this be so, ere long we shall have steamships and locomotives running themselves from nothing but air-in fact, almost perpetual motion. However, just as it is, this new property is a marvel, and to see Tripler's engine running without a vestige of heat, in fact, with ice on her firebox, and yet the wheels revolving and producing power, is, to say the least weird and awe-inspiring.

At the beginning of the century, indeed, until nearly its close no one dreamed that the great cataract of Niagara would ever be utilized for any purpose. It was Nature's awe-inspiring wonder, an object of matchless sublimity, but nothing more.

to operate great electric dynamos for generating power for many factories in their neighborhood. The waters of lakes Superior, Michigan, Huron and Erie empty into the Niagara River, which after leaving Lake Erie flows swiftly for two miles and then widens and separates above Grand Island into two branches. These come together again below the island, and flow slowly about several islands till their combined waters reach the "rapids" about a mile above the falls. The flow of water here is 275,000 cubic feet a second, or half a million tons per minute. This enormous flood was first utilized for power in 1725, when a small saw-mill was erected near the falls and run by its force.

Niagara Harnessed.

The Niagara Falls Power Company has made cuts in the river a mile above the American Falls. Water is led in from the "rapids" by a canal 12 feet wide and 180 feet long, with capacity of 100,000 horse power, to a wheel pit 30 feet wide by 200 feet long and 180 feet deep. Eight steel pen stocks restrain the water in its plunge down to the bottom of the wheel pit, and at the base of each is a 5,500-horse power vertical turbine. The shaft of each turbine is attached at the upper end to a 5,000-horse power generator, which gives the plant a total capacity of 40,000-horse power.

From the wheel-pit the water runs through a tail-race 7,000 feet long, directly under the town of Niagara Falls to an outlet at the base of the cliffs. The Niagara Falls Paper Company uses 7,200 hydraulic horse power from this same point, taking it from the The Falls of Niagara are now used canal before it reaches the penstock.

Another plant, operated by the Niagara Falls Hydraulic Power Company, takes in water from the rapids 2,000 feet below the other intake, and runs a canal through the town to the edge of the gorge, where two penstocks, eight and eleven feet in diameter, take the water to a power house 200 feet below at the edge of the river. Here horizontal turbines develop energy to about 20,000 horse power. An old canal built in 1858 also supplies about 7,500 horse power. On the Canadian side the Niagara Falls Park and River Railway operates a power house with two turbines, and generates 2,000 horse power.

The theoretical power that is possible from the Falls is that of 7,500,000 horses, of which, however, less than 50,000 is being developed and put to useful account.

The turbines that do the work of generating power are arranged in pairs. Each is attached to a 13-foot diameter inlet tube. Two large revolving bronze wheels receive the water, which has

first been governed by pressure gates, and led into the wheels by draught tubes, which are so arranged as to keep the dampness out of the machinery. The turbines are 70 inches in diameter, and have 36 blades, each one of 142 square inches and highly polished so as not to give resistance to the water. The axis of each of the great wheels is 11½ inches in diameter, and they are all mounted on ball bearings. Each turbine revolves 250 times a minute.

Industries using electric power for manufacturing paper, aluminum, carborundum, calcium carbide, and other chemical industries, street railways of Niagara and a railway of twenty-two miles to Buffalo, are all being operated by this great power generator. Buffalo alone takes many thousand horse power. It was at first thought that the electricity thus generated would sometime be taken great distances for power purposes, but the tendency is more for industries to move near Niagara than to transmit the power.

GOODYEAR'S PROCESS FOR UTILIZING INDIA RUBBER.

An American invention of the greatest utility is that of vulcanized Indiarubber, the production of a poor man named Charles Goodyear, who, like Howe, spent years of his life and endured semi-starvation while persistently experimenting. Beginning in 1834, it was 1839 before, after innumerable failures, he discovered the secret of vulcanizing the rubber by means of sulphur.

Before that date the softening effect of heat rendered rubber practically useless, but the vulcanized rubber produced by Goodyear was, before his death in 1860, applied to nearly five hundred hungry, but never gave up.

purposes, and gave employment to 60,-000 persons in Europe and the United States. Since then its utility has very greatly increased, and its employment for bicycles and carriage tires opens up a new field for its use which must enormously increase the demand.

Goodyear's history affords another striking illustration of what inventions that have come to be most highly prized cost the men who gave to them time, labor, brain, all the money they had and even life itself. He was called a fool and madman, went ragged and hungry, but never gave up.

DISCOVERIES IN THE ART OF HEALING.

Many diseases and injuries which were formerly considered incurable and always resulted in death are now successfully treated by the masters of medical science. Thousands of persons owe their lives and healthy physical condition to the progress in surgery during the last decade of the century.

With the experiments in treatments for disease by electricity, X-rays, the Finsen violet light, and Pasteur serums for plague microbes, the world of science is fast advancing upon the diseases that flesh is heir to. Most scientists are coming around to the belief that a vast number of ailments commonly attributed to various or unknown causes all have their origin in microbes or bacilli, —tiny animal natures that feast themselves upon the tissues of the human body.

Germs of Disease.

With this thought in view, they have steadily sought out the particular germs of certain diseases, with the result that many have been classified. The next study was to find some remedy that would effectually chase these intruders out of the system. At present scores of microbes have been found, some that cause one disease, others that cause others. Thus tuberculosis, or consumption of the lungs, diphtheria, plagues, cancers, and yellow fever, each has its own peculiar bacillus, and physicians are daily searching for more and surer enemies to these little pests.

Light in almost any form and pure air are very beneficial in these diseases, being deadly enemies to most microbic organisms. Consequently scientists are are killsearching through these media for the lagain.

desired remedies, and yet in some cases air on a sore surface aggravates the trouble. Dr. Murphy invented a process for the treatment for consumption in which he pierces one lung by means of a small hollow needle. Through the aperture of the needle he admits a quantity of gas which collapses that lung in its diseased part, and it scars over and is healed. Dr. Murphy was also the inventor of the famous "Murphy button" for piecing severed intestines.

Liquid air, though in its crude stages for surgical uses, is yet hailed as a great boon to man. As already stated there is not to be found any other means of producing such intense cold, and the effect upon animal tissue of this strange property of air is nearly the same as intense heat, though no blister is occasioned. In cauterizing wounds, in removing foreign growths and killing putrid flesh, this method is sure and has few evil after effects. It cures corns, warts, boils, ring-worms, ivy-poisoning and ulcers, forms of rheumatism and neuralgia, kills typhoid fever germs, as well as diplitheria, and in part supplants the surgical knife.

Finsen Light Cure.

Probably one of the greatest discoveries of recent years in medicine has been that of Dr. Finsen of Copenhagen for the cure of skin disease by subjecting the affected parts to strong violet rays of light. It is well known that such maladies are caused by bacteria, and when light in concentrated violet hues is cast upon diseased tissue it has been found that the bacilli are killed and the skin becomes healthy again.

The bactericidal property of light had previously been proved. Investigations at the Finsen Laboratory showed that that property, instead of residing in light as a whole, was peculiar to the chemical rays. These rays have a power to irritate the skin and to penetrate it. He exposed a specimen bacillus to bright sunshine in July, and found that the rays killed it in an hour and a half. The light from an electric lamp did the same work in about eight hours.

Known by Experiment.

It was learned that when the skin was full of blood it was harder for the light to penetrate. This was proved by fastening a piece of sensitized photographic paper behind a man's ear and placing him in the sunlight. After a considerable exposure the paper was unaffected. When the ear was afterwards pressed so as to squeeze the blood from it an exposure of twenty seconds turned the paper black.

Now, as soon as Finsen had learned that the blue rays of light had the properties of killing disease germs, he set about devising a method for its practical use. The result has been a set of lenses between which is a bright blue, weak, ammoniacal solution of copper sulphate. This water absorbs the red or heat waves and some of the yellow, but allows the blue, violet and ultra-violet rays to pass.

To the surface of the skin to be treated is attached by rubber bands a lens between the glasses of which is run a stream of water to cool the surface and keep from blistering the skin, while at the same time the weight of the glass presses out most of the blood. When

the rays are turned on, they at once penetrate to the spot where the germs are feeding upon the tissue and destroy them. It is said the treatment has been very efficient in smallpox, lupus or tuberculosis of the skin, baldness in small spots, and other epidermic ailments, and the patients say there is little or no pain, and are quite ready to undergo the treatment.

Pasteur's Discovery.

In the Pasteur institute for rabies in Paris all the personstreated in 1898 were cured with the exception of three. For the thirteen years since the foundation of the institution to the end of 1898, 13,183 persons were treated in Paris, and out of this number only ninety-nine died.

Anti-Toxin.

A serum called anti-toxin has largely been put into use as a cure for diphtheria. It is a brownish liquid prepared from the serum taken from the glands in the neck of a horse inoculated with the disease to fever point. The serum is allowed to stand and the anti-toxin comes to the surface and is skimmed off. By injecting the anti-toxin into the blood of the subject there is at once sent through the system a most deadly enemy to the diphtheria germs. One wellknown physician in two years' practice with this remedy treated 2,100 cases in malignant form without losing one patient. The after effects are somewhat weakening, however, as the action of the anti-toxin tends to retard the heart's motion

The X-Ray.

Brain specialists have hailed with joy the X-ray as a medium for learning whether clots of blood are pressing on certain parts of the brain, thereby causing insanity, or inaction of some of the faculties. The X-ray is also used for many other surgical and anatomical purposes, as already stated.

Skin and Bone Grafting.

Improvements along the line of skingrafting and bone-making has been going on rapidly. It is no uncommon occurrence to graft over burned or diseased spots large pieces of flesh and skin, taken from the body of a healthy person. In bone-growing, animal bone has practically supplanted the insertion of foreign substances, such as plates of silver and the like. Decalcified bone chips (that is bone with the lime taken out) are prepared from the fresh tibia or femur of an ox by being kept in a weak solution of hydrochloric acid for about a week.

The periosteum, or outer skin of the bone, and the medullary tissue (marrow)

are removed and the flimsy bone is cut into long strips about one-eighth of an inch wide. These, when they are to be used, may be cut into smaller pieces, and laid in the cavity of the patient left by the old bone being taken out. The skin of the wound is replaced, and gradually the grafted bone grows into the bone of the patient and performs its new functions as well as that with which he was born. For cranial defects, larger bones must be sought out and used in the same way.

Such are some of the marvellous discoveries in medical science by which the close of the century is distinguished. In this most beneficent field of operation for curing disease and abating human suffering, the advance has been such as to almost challenge belief. It is hardly too much to say that modern surgery can take a man to pieces, reconstruct him, and put him together again, having given him a new lease of life.

DISCOVERY OF ANÆSTHETICS.

The century has produced scarcely any greater boon for humanity than that of anæsthetics, whereby pain may be alleviated, and in most surgical cases may be absolutely prevented.

As early as 1795 sulphuric ether was used for the relief of spasmodic affections of the respiration. The fact that sulphuric ether could produce insensibility was shown by the American physicians, Godwin in 1822, Mitchell in 1832, Jackson in 1833, Wood and Bache in 1834; but it was first used to prevent the pain of an operation in 1846, by Dr. Morton, a dentist of Boston. The news of his success reached England on December 17th, 1846, and on the 22d, Mr. Robinson, a dentist, and Mr.

Liston, the eminent surgeon, operated on patients rendered insensible by the inhalation of sulphuric ether.

This material was extensively used for a year, when Sir James Simpson of Edinburgh, discovered the anæsthetic powers of chloroform, and introduced the use of it into his special department in the University of Edinburgh, which was obstetrics. Since that time chloroform has been the anæsthetic in general use in Europe; both it and ether are extensively used in our own country.

Other substances have been used by inhalation, such as nitrous oxide, which is the best and safest anæsthetic for operations that last only one or two

minutes, as in the extraction of teeth. The employment of general anæsthetics in surgery has greatly increased the scope of the surgeon's usefulness, and has been a great boon to suffering humanity Local anæsthesia, artificially produced, is of great value in

minor operations and in painful affections of limited areas of the body. If the Nineteenth Century had furnished no other discoveries than this it would deserve to rank high among all the periods of time since the world began.

EXPLORATIONS AT THE BOTTOM OF THE SEA.

Since the day when Jules Verne wrote his famous "Twenty Thousand Leagues under the Sea," there has constantly been some inventor experimenting to solve the problem of travelling by a boat submerged under the surface of the water. Verne's boat, the "Nautilus," was a marvel of imagination, but others as wonderful in their reality have appeared, which, though not perfect in all things desired, yet do operate at the bottom of the sea, float under the surface for several hours, and come up safely.

Such boats are being constantly studied by the war departments of the great powers, perhaps more than by any one else, for reason of the uses to which they may be put during war. Such a submarine traveller, supplied with a number of torpedoes and with an air supply to last the crew for a few hours, could send to everlasting rest a whole navy, equipped though it might be with the most modern methods for protection and attack.

France, as much as any other nation, has been interested in this subject, and the result of her studies has been several boats brought forth by the skill and inventive genius of Gustave Zede. This clever man, in 1886, built at Toulon an experimental vessel, the Gymnote, so as to test the principles he held with a view to embodying them in a larger and

more complete war vessel. This boat was not much more than a large Whitehead torpedo, made of sheet steel in the shape of a cigar, being 56.7 feet long by 5.9 feet in diameter, and with displacement of thirty tons. To this shell were attached horizontal and upright rudders, so that she might be steered straight ahead by using the usual rudder, or might be made to dive or rise by use of the horizontal rudder.

Electric motors with storage batteries supplied the power for the screw propeller, and a speed of seven knots an hour submerged and of nine knots on the surface were secured, while the batteries would run constantly for from four to five hours. Buoyancy was secured by a watertight compartment fore and aft, and sufficient compressed air was stored to supply the crew of five men when submerged. Besides these contrivances there was a heavy ballast attached to the bottom of the boat on the keel, that could be detached at a moment's notice in case of accident, thus allowing the vessel to rise.

A long tube with reflecting lens and mirrors rose from the boat like a mast. This could be bent at an elbow at right angle and made to turn about, so that the image of any object at any point of the horizon could be reflected to the cabin of the boat when it was sno

merged. Without this "prismscope" it would be almost impossible to keep track of the enemy when on a cruise under the surface.

The experiments with the Gymnote were so wonderfully successful that the French government at once set Zede to work making a large one for prac-The result was the vessel tical use. which excited the interest of all the countries, and which, in honor of the inventor, was named the Gustave Zede.

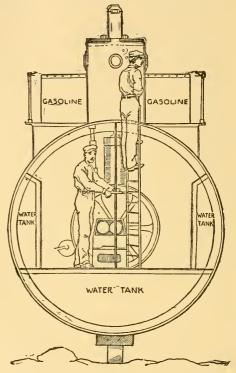
Dimensions of Boat.

The length of this boat is 147 feet, diameter 10.75 feet, and displacement 260 tons. The hull follows the general lines of the former model, being cigar shaped with very sharp ends. speed has been increased to 81/2 knots an hour below and 14 knots on the surface. Ten men constitute the crew, and enough stored air is carried to last them while below. In the nose of the boat is an opening for discharging an ordinary torpedo. She can operate in deep and shallow water with remarkable success, and trips averaging between seventy and eighty miles are her average runs, thus giving her power to make a fighting dash at any enemy within a radius of thirty-five miles, and return in safety.

Various boats having the same general principles have been made and operated with much the same success, among others the Nordenfeldt, the Peral, Goubet, and the Holland, the latter a remarkable vessel built by an American, which has been successfully tested by the United States government.

Of a different sort altogether, however, is Simon Lake's invention, the Argonaut.

the path of the inventor who tries to keep his boat floating under the surface in equilibrium with the water, he set about to contrive one that would travel on wheels at the sea bottom. In all types of floating boats, there is great danger of misplacing the ballast and



thus tipping the boat over on her side. This was what Lake figured against, and accordingly he brought out a boat that would float on the surface propelled by a screw, yet when closed and loaded with its water ballast, would sink to the bottom and advance along the unknown highways by means of large wheels, after the style of a locomotive.

The vessel is thirty-six feet long, cigar-shaped, with blunt nose and pointed stern, and is fitted with a thirty-horse power gasoline engine which operates the screw propeller, Knowing the difficulties that beset driving wheels, the electric dynamo, the

air compressor, and derricks for hoisting the weights. Like many other submarine boats, she is supplied with air when all but below the surface, by a steel tube reaching up in the air in the shape of a mast. Down this comes a fresh supply of air, and out at another similar one

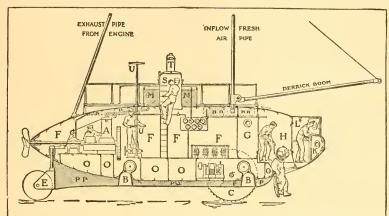
hours is easily stored, and with occasionally running up near enough to the surface to let the steel tubes send down more air, these trips can last as long as gasoline and food hold out.

The accompanying sectional view of Argonaut submerged, shows man in con-

ning-tower making observations; also man steering with third wheel, which rests on the ocean bottom. Water tanks are filled when descending, and pumped dry when ready to come up. The water tank is also shown.

A, gasoline engine, 30-horse

power which supplies all the power in moving and operating the boat. BB, two anchor weights used in sinking boat. C, one of the two driving wheels. E, rudder and guiding wheel. FFFF, living room, in which are placed the engine and all other machinery and apparatus for operating boat. G, air lock; this affords a passage to and from diver's room without reducing air pressure. H, diver's room, whence is had free passage into the sea. K, bow compartment where searchlight is placed. L, forward lookout compartment. MM, gasoline tanks. NN, compressed-air reservoirs. OOOO, water-ballast compartments. PP, permanent keel. PO, drop keel. R, dynamo. S, conning-tower. T, binnacle; the compass in this binnacle is in direct view of the outside steering gear, but from the conning-tower is read by reflection. U, outside steering gear. In general form the Argonant is cylindrical.



goes the exhaust steam from the engine. In her nose is a searchlight that shoots out rays far ahead into the water; on her bottom is a heavy false keel that may be released in case of accident, allowing her to rise because of added buoyancy. The vessel is guided by a compass, and it is found that this is entirely practicable below as well as above water, only it must be kept high above the machinery, which would otherwise affect her needle. Compressed air is resorted to for breathing supply when the boat is so far below the surface that the engine has to be stopped and the masts are entirely submerged.

Then the electricity, stored up by the dynamo while the engine was working, is used to operate the machinery. Trips of 1,000 miles have been made in the Argonaut without landing, a great part of which was spent below. Air supply sufficient for five men for twenty-four

Simply to go below the surface and not be able to leave the boat would be of little avail. The Argonaut is therefore fitted with a diving apparatus so that men may leave the boat at any time, explore a wreck, fasten a torpedo to an enemy's war ship, pick up a cable and cut it, or go a-fishing after sharks. This is all done by means of a hole in the bottom of the boat near the forward end. When a diver wishes to leave the boat, he puts on a diving suit and goes into the diving compartment, which has a great heavy door with rubber packing.

This door he closes, and cuts off the diving compartment from the living rooms and machinery. Then he turns on the compressed air till the pressure in the room is greater than that of the water that wants to come in. He then lets drop the heavy iron door to the

hole in the bottom of the boat, and steps out, and not so much as a drop of water enters the vessel. Or suppose in time of war the telegraph cables of the enemy are to be cut. Instead of putting on a diving suit, the man to do the work simply goes into the diving room, turns on the air pressure, lets the trap door drop, and by means of a short wooden stick with a hook in the end reaches down and picks up the cable and cuts it.

The possibilities of such a boat are very great, both in time of peace and war. In salvaging wrecked ships and treasures a submarine boat would do marvels, as well as in pearl, sponge and coral fishing. The work of laying foundations for lighthouses, piers and breakwaters would be wonderfully facilitated, as well as in landing armies during a blockade, and blowing up war ships.

DEATH-DEALING MACHINES OF WAR.

It has been said that improvements in deadly war missiles will before long put a stop to war altogether. One would almost think so when it is considered what marvellous strides invention has taken along this line. Time was, and not long ago either, when the round cannon shot was aimed at the tough oak side of the frigate; when the grappling chain and cutlass for hand-to-hand conflicts were necessary on all war vessels, and the bayonet and cavalry charge played great parts in land battles.

Most of this is now changed. The iron shot gave way to steel projectiles, as the wooden hulls were replaced with steel. The completeness of victories, however, is no less than in centuries past; distances are only greater. And

each increase in the power of improved explosives and projectiles will be met with greater defensive devices, and with greater distances between the firing lines. It will be the brotherhood of man, not the deadliness and fear of weapons, that will bring about universal peace.

In weapons and death-dealing machines for land forces there are, at the close of the century, such improvements as the far-reaching rifle, with its nickel-capped bullets, the Gatling, Maxim and Hotchkiss guns, smokeless powders, and such explosives as cordite, dynamite, lyddite and nitro-glycerine. Charges play some part, as in the gallant fight of San Juan Hill, but, in the main, artillery and long-distance firing prevail. With the navy more marvel-

lous improvements have been made. Nearly everything on board ship can now be operated by electricity. Ships are lighted, torpedoes, guns and mines fired, searchlights are operated, torpedo-boats propelled, and a hundred other devices all controlled by this weird agent.

The armor plates of the modern vessel are thick and of the hardest steel known, yet they are readily pierced by the enormous shells thrown at the distance of several miles from the throats of great dynamite and compressed air guns. Among the numerous explosives of high power that are coming into use, the newest and possibly the most powerful is lyddite.

Powerful Explosives.

Like others of its class, such as dynamite, melinite, cordite, maxinite, etc., it is picric acid brought into a dense state of fusion. Picric is obtained by the action of nitric acid on carbolic acid. When lyddite shells explode they grind their outer coverings into small fragments, and with a noise like the downfall of the heavens, tearing everything to pieces for yards around. This explosive was used by the English in the war with the Boers, though the latter complained that such was against the codes of civilized warfare. General Kitchener also used it in his campaign of the Soudan with tremendous effect. A shell was dropped into a mosque at Omdurman, where 120 Mahdists were worshiping. The mosque and its inmates were blown into pieces, and only twelve of the worshipers escaped alive.

In the war between China and Japan, cordite, a similar though inferior explosive, was thrown in a twelve-inch shell

into the Japanese flagship Matsushima with the effect of hurling a 4.7-inch gun from its mounting, firing a heap of ammunition, disabling two more 4.7-inch guns, and killing and wounding ninety officers and men.

Smokeless Powder.

Smokeless powder is another deadly explosive, having for its main peculiarity the quality of exploding without smoke, giving only a slight violet vapor, that is not sufficient to betray the ambush of the gun. This kind of powder is made in long cylindrical strings and then cut up into small pieces. In the United States war supply factories, it is coated with plumbago by being placed in receptacles with the powdered black lead or plumbago and shaken up. This coating, being rather oily, keeps the powder from igniting by friction in case of rough handling.

Cordite looks a great deal as its name would signify, something like brown jelly pressed into long strings from one-sixteenth to one-half inch in diameter, and dried. Some kinds of smokeless powder look for all the world like carefully cut strips of slippery elm bark. It is made in slabs about one-fourth inch thick and a foot and a half to two feet long. This powder is much safer to handle than common black or brown powder, and will bear quite a blow provided no sparks are struck.

Like all smokeless powder, it will burn without special danger if a match is applied to it, with a clear, steady flame, not flashing with a big s-s s-s like the old sort. Some of these explosives are cut into pieces just like Saratoga chips, and it is a rather blood-curdling job for one not informed to watch shell loaders hammer home this stuff into the big shells as though in truth it were only so much potato.

Nitro-Glycerine.

This is used in some of its forms for war purposes, but more especially for blasting oil-wells and the like, is one of the most difficult of all explosives to manufacture. It is generally pale yellow in color, is odorless, and has a sweet pungent taste, though when touched to the skin will cause severe headache. It is made in a large tank called an agitator, which has a set of revolving paddles. Into this are poured equal quantities of nitric and sulphuric acids, and after a mixture of 250 pounds is secured, sweet glycerine to the amount of 1,500 pounds is added. The chemicals naturally tend to come to great heat, but since 90 degrees explodes the mixture, water pipes are arranged about the vat to keep down the temperature.

In carrying this explosive there is great danger of jarring. Makers of the stuff generally live only about five years at their work. As in all other factories of powders and the like, no metals are allowed, and the shoes and clothing of the workmen must be changed to suit their employment. Canvas shoes are used, and the men may not turn their trousers at the bottom for fear of bringing in grit and gravel that might strike a spark.

Projectiles.

These have improved in weight and hardness so that in battle tons of metal are fired through great granite fortifications and steel clad ships with greater ease than the old-time round shot could pierce an oak side. Early in the nine-

teenth century methods for throwing hollow shells filled with powder or small shot were invented. From canister, grape and chain shot, there have evolved heavier shells, generally explosive, but also of such hard and sharply pointed steel that no armor can withstand them.

Most of the smaller rifles are equipped with balls that pierce the object aimed at cleanly and without jagged edges. Cases have been known where such a ball passing through a person did not even inflict a severe wound. Such is really the result aimed at in civilized war; either to kill a man outright, or simply temporarily to disable him.

Dum-dum Bullet.

Some kinds of shells, however, are diabolical in their intent. Among these is the dum-bum bullet, declared barbarous by the Peace Convention at The Hague in 1899. Some small shot explode after entering the body; others, like the dum-dum bullet, flatten out when they strike any object of resistance, because of their soft material, being only partly covered by a nickel envelope, and these at once make fearful, jagged wounds, and are hard to extract.

The "Base" Shell.

The bottom or blunt end of the shell, which is large and for cannon use, is separate from the rest of the shell. This "base" rests on ball-bearings, and, while the upper portion revolves, it is stationary. Attached to the base and folding up into grooves along the upper part are four murderous scythes. When the shell is thrown from its gun, the rifling of the core starts the point of the shell revolving, the knives, pushed by springs, jump out from the sides of the

base, and as they go through the ranks of the enemy cut and main every man in their course. Then, after its work is nearly complete, it explodes and works more havoc. The knives when outspread cover a diameter of forty-five inches, and it may be imagined what carnage such a missile will create in the rank of a closely lined infantry.

Searchlights.

These have brought about a great revolution in warfare. By their means lights and signals can be thrown many miles, and the work of the enemy in the night detected. The average searchlight is made up of lenses and reflectors so as to condense or diffuse the light of a 25,000 candle-power electric arc lamp. They are made in the shape of a cylinder about thirty inches deep and from two to three feet in diameter. In the back is a silver-backed reflecting lens, and at the front is a glass door. Within is an electric lamp placed at the focusing point of the lens. Between the glass door and the lamp is a smaller reflecting lens that throws the light of the electric lamp into the large lens, and that lens in turn throws the concentrated rays out through the glass door miles and miles into the night.

The whole affair is mounted on a pedestal, and can be moved in any direction at will. The rays of light are generally kept together so that a beam 3,000 feet away covers only the width of fifty feet. This, however, can be changed at will if desired.

Torpedoes.

These are the dread of all war vessels, and work as much havoc as any other weapon. They are shaped like a

cigar, with propeller at the rear and an awful load of dynamite or gun-cotton at the nose. Inside is an electric storage battery attached to a motor that operates the propeller. When ready to be discharged at the enemy, a torpedo is placed in a compressed-air device that shoots it out into the water, aimed in a certain direction. The electric battery has been turned on and the rudders so arranged that the torpedo will travel in a given angle. It drives forward at a great speed, the cap on the nose strikes the side of the ship and discharges the explosive, and the ship is torn into pieces.

Submarine Mines.

Mines are used for protection of the harbors against an incoming enemy. These are big bombs placed at the bottom of the harbor or straits and connected by electricity so that they may be fired off at will. Charts are made of the harbor, and so figured out that the attendant several miles away can look through a telescope at the approaching enemy, and can tell at just what moment the intruder is over a given mine.

He then turns a switch, and the great vessel of steel and iron is blown into the air with a vast volume of water, and rapidly sinks. Some mines are fast to buoys which float at the surface, so that when a vessel coming into the forbidden waters strikes one, an electric spark is carried down to the mine and it explodes.

Machine Guns.

Among these the Gatling, Hotchkiss and Maxim are the deadliest because of their rapid fire. The Gatling has a number of barrels joined together side by side, and at a distance looks like a

big stubby cannon. There are generally about ten barrels, which revolve upon a pivot. Each chamber has a separate lock which is discharged automatically when the barrel reaches its proper position. The machine is worked by a crank; the cartridges are placed in a rack with grooves that let them slide down into their proper chambers as soon as the fired shells have been ejected. As many as 1,200 shots a minute have been fired by the Gatling gun.

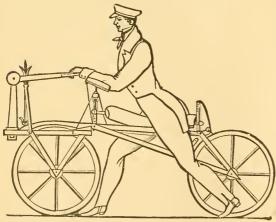
The Maxim differs in that it is wholly automatic; after each recoil of a previous discharge the shock opens the breech, extracts the empty shell, takes a fresh cartridge, cocks the gun, pushes the shell into its chamber and fires the gun. The cartridges are loaded into the gun in a belt, and all the operator has to do to is pull the trigger the first time, and the belt is ground through at the rate of 600 shots a minute.

The Armstrong gun is the largest of the rapid-fire guns. It is for large caliber shells, using 41/2 pounds of smokeless powder, and throwing six-inch projectiles weighing 100 pounds with enough force to penetrate fifteen inches of wrought iron. A smaller gun of the same order fires forty-five pound shells at the rate of fifteen per minute.

The Driggs-Schroeder and Hotchkiss rapid-fire guns are inventions of Americans, and are used largely on our battle ships, especially in the "fighting tops." These swing on pivots, so that they may be directed to any quarter. They fire one shot at a time, and to aim the gun an arm-piece similar to that of a rifle is attached. The gunner presses this against his shoulder and steadies it, while his two hands remain free to open the chamber, insert a shell, pull the trigger, and reload. It fires at the rate of thirty-six shots a minute.

INVENTION OF THE BICYCLE.

popular use during the last quarter of which the use of the horse could be set



DRAISINE-1816.

the century was the bicycle. Many in favor of it. The exercise is healthyears previous to this attempts were ful when not overdone.

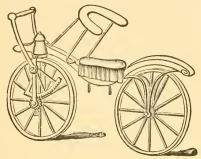
Among the inventions that came into | made to construct some vehicle by

aside, yet its speed could be assured. As in nearly all inventions the first efforts were only partially successful and the machines that were built were not adapted to general use, and were therefore unsatisfactory.

All this has been obviated and it is evident that the bicycle has come to stay. No new method of locomotion ever leaped so rapidly into public favor. While there have been differences of opinion as to the physical advantages of cycling, the weight of this opinion is decidedly

Even walk-

ing may be overdone, and is liable to the same objection that might be made against the wheel. A person must know when his ride has been long



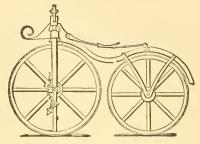
HOBBYHORSE-1821.

enough, and knowing this he should have will power enough to stop.

It is nothing uncommon now to see business men in all parts of our country making use of the bicycle. It gives promise of a more robust health and a better physique.

Cycling has a short but brilliant history of the past. In endurance man mounted on a cycle has beaten the strongest and fleetest of domestic ani-

faster, but where is the horse that could cover forty miles under two hours, as not one but several cyclists have done in the fifty miles championship? What horse could turn out morning after morning, and trot or gallop over a hundred miles a day, as have some cyclists?



LALLEMENT'S VELOCIPEDE-1866.

A practical knowledge of cycling tends to increase one's wonder at these "giant performances."

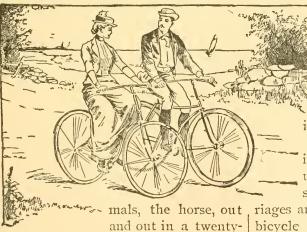
At first the bicycle was likely to be regarded as merely a toy, while young and old attempted to ride it more for the purpose of seeing whether they could do it than for any other reason.

The motion was exlilarating and the exercise was lively, but not for these reasons would the bicycles be so universally used. There are other and

important considerations.

As already said, business men in large towns and cities make use of the bicycle instead of street cars and ordinary car-

riages and horses. More and more the bicycle has come to be regarded as useful, and it is not likely that this use will be diminished. Postmen in the suburbs of cities and in country places employ it; errand boys make use of it



four hours' ride. What horse could compete against a cycler who covers, as some have done, over 300 miles a day? Horses have trotted a mile rather

everywhere, while at the same time as a vehicle for exercise and pleasure it is a popular favorite.

Many improvements in handle bars, in lamps, in saddles, in fact, in all the various parts and appliances of the malar invention for locomotion.

chine have been made, and these have found ready favor with the general public. An immense amount of capital and a vast number of hands are employed in the manufacture of this popular invention for locomotion.

TRAVELLING IN THE AIR.

Scientists and mechanical engineers are looking for some one to bring to perfection a practical flying machine or air ship. They no longer laugh at the idea that ærial flight is a possibility, but instead say that it is not only a possibility but a strong probability.

Lilienthal's Method.

The reason for this is that a number of men have been steadily experimenting upon kites, æroplanes and balloons, with the idea of being able sometime to direct them at will. Otto Lilienthal, a German inventor, came as near, perhaps, to perfection as any one yet, while Maxim, the gun inventor, was to some extent, successful. The latter built a machine eight feet wide and forty feet long, which by propulsion by screws made a number of flights.

This was not only successful in pro-

pelling to some distance a machine through the air, but also carried its inventor. Near Berlin, Lilienthal built a tower about fifty feet high on a hill, and from this he sailed as far as six hundred feet in easy winds, sometimes against heavy winds, and on several occasions he reached a height greater than that from which he started. These experiments though they advanced the science of æronautics, at last resulted in the inventor's death by collapse of his machine. Professors Chanute and William Paul conducted a series of æroplane flights at Dunne Park, Indiana, on the shores of Lake Michigan, which were in the main successful. No motive power was used, the principle being that a slide down hill would lift the plane a distance into the air, and then by other planes and rudders, the machine was kept in the air for some time.

CHAPTER XXXIV.

Inventions Applied to Railways and Canals.

OWN to 1850 progress in railway building was very slow, but shortly after came a great "boom" in stocks, and the years succeeding 1865 were noted for their vast strides in railway improvements and construction. In 1830 there were not twenty-five miles of rail in the whole country; at the close of the century the total mileage of the United States was 184,532. This is about half the number of miles in the whole world.

In 1850 nearly all the roads were confined to the North Atlantic States, but in the next decade a number of lines were pushed west to the Mississippi, and shortly after came the first great transcontinental system to the Pacific. The railroads built in the west were necessarily forerunners of civilization, and where the engine had to go under armed guard to keep off the attacks of the Indians, it was not to be expected that construction would be other than cheap. Towns did not have to be consulted as to rights-of-way, for towns followed rather than preceded the railroad.

As years went on, however, this cheap method of building was thrown out for new and modern improvements, and everywhere old wooden culverts were replaced by steel bridges, secure rock ballast took the place of the bedding that was formerly so easily washed out, and heavy and continuous steel rails form even and smooth tracks, instead and drink of a poor quality and enormous price. The night train was a thing unheard of and the Pullman sleeper had not yet made its appearance. To-day one journeying from coast to coast need hardly give a thought as to his comforts after he has boarded the modern cross-country "flyer." Trains are really almost smooth-run-

of the old warped iron affairs. Curves have been straightened, steep and dangerous grades have been abandoned for cuts and tunnels, many murderous grade crossings have been bridged or tunnelled, and the roads are supplied with block signals.

All this takes enormous wealth, but the roads are constantly increasing in that direction. It is true that many improvements are yet to be expected, even with our "lightning flyers," ere travel will become perfect, but these improvements will be made.

Vast Improvements.

If the number of miles constructed has been great, even greater has been the development in the luxury and ease of travelling. In 1850 the continuous steel rail had not been invented, and the link-connected cars clattered along over the disjointed rails with a rattle and bang that was nerve destroying. only conveniences then provided for, even on the "through trains" across the country, were a few telegraph blanks, a separate smoking apartment, and, in some cases, a buffet from which were served food and drink of a poor quality and enormous price. The night train was a thing unheard of and the Pullman sleeper had not yet made its appearance. To-day one journeying from coast to coast need hardly give a thought as to his comforts after he has boarded the modern cross-country "flyer."

ning, and are equipped with every device for comfort that man can imagine.

Drawing-room, observation, dining, and sleeping cars arranged with an eye to artistic effect as well as to luxurious comfort, are ever being improved upon by the companies, while electric and gas lights, vestibules between cars to keep out noise and dust, barber sliops, buffet smoking cars, card rooms, and libraries and music rooms, with waiters and porters at every turn, are daily adding to the ease of travel, as well as to the pocketbooks of the railway magnets. To think, then, that all these devices will soon be applied to trains of cars running regularly across every continent on the globe is to wonder what will be the limit of man's power.

Immense Engines.

In the last year of the century transportation as represented by the gigantic railway system of the United States, with its 184,532 miles of roads, recorded a healthy growth; not so much by added mileage as by improved rolling stock and roadbed, more commodious stations, a faster time card and a slowly (too slowly) lessening casualty list. For the fast transcontinental mail trains exceptionally powerful express engines, with boilers of unusual capacity, were constructed, and the big freight engines of over 100 tons weight of the preceding year were followed by others of even greater weight.

The steam locomotive continues to be unrivaled as a traction motor, for heavy or long distance work, notwithstanding the experiments with a combination steam-electric engine. The fastest trains in the world were those run on the Pennsylvania and Reading roads from Philadelphia to Atlantic City during the summer months. These trains, whose scheduled speed is sixty to seventy miles an hour, frequently made the runs of 55.5 and 58.3 miles at rates of from 68 to 74 miles and hour with trains weighing as high as 290 tons.

Fastest Trains.

The palm for the fastest regular express service, however, must be awarded to the great French Railroad, Chemin de Fer du Nord, which is unapproached in the number and average speed of its fast trains. The service includes no less than forty-five trains, with a running speed, including stops, of over fifty miles per hour, and of these no less than ten are timed to run at speeds of from fifty-four to sixty miles per hour. The service is worked by four-cylinder compound engines.

The Great Boston Terminal Station, the largest structure of its kind in the world, was opened for traffic in 1899, and the Philadelphia subway and tunuel, costing \$6,000,000, were also completed. In New York city awards were made for the construction of the tunnel road as a solution of the rapid transit problem. Besides the new East river bridge, under construction, two more were to be commenced at once, unless the tunnels proposed prove more economical. The most important harbor improvement was the cutting of a 40 foot channel in New York harbor.

Electricity continued to oust every other form of power for street railway work; indications were that for city work the underground trolley would be the exclusive system, with the overhead trolley for suburban and short interurban lines. The electrical equipment of steam roads did not progress as rapidly as anticipated, though the results of the third rail system on the New York, New Haven and Hartford Railroad were quite satisfactory, and extensions were planned. The great system of the Manhattan Elevated was

there is one of similar nature being promoted by American capital that is to be called the International Railway, or the Pan-American Road. At the expense of \$25,000,000 it is to connect this country with the South American states, starting from Matamoras, on



MAP OF THE TRANS-SIBERIAN AND CHINESE EASTERN RAILWAY.

Showing the entire route from Port Arthur to St. Petersburg. The dotted line marks the section where work was not completed in 1900.

to be electrically equipped, several thousand tons of third rail having been ordered in 1899.

As the century entered upon its closing year there were, in course of construction, two marvellous lines: one, the Trans-Siberian route, being laid by the Russian government from St. Petersburg, Russia, to Port Arthur, China, thus taking in all the resources of unknown Siberia and China; the other the "Cape to Cairo" route, as yet only partly built and partly on paper, but a marvel in imagination, extending from the Cape of Good Hope, at the most southern extremity of Africa, up through unknown savage lands to its northern terminal at the old capital of the Pharaohs, Cairo, Egypt.

Besides these two great undertakings, |

the Rio Grande border, running along the gulf coast to Guatemala, then along the border and down through the South American states to the Pacific coast, thus making a thread line from North to South America and connecting the two continents.

Had Russia imagined in 1867 that she could ever have accomplished such a work of engineering skill as that of the construction of the Trans-Siberian and the Chinese Eastern Railways, she aever would have sold to the United States for the paltry sum of \$7,000,000 the great territory of Alaska. Instead she would have been our neighbor, with a seaport at Fort Wrangell, almost at our doors on Puget Sound, and England, with ever-watchful eyes, would turn from Russia at the gate of Herat to

Russia within a day's march of Vancouver.

But the first work of building this great thread across a continent full of superstitious semi-savages was not commenced till May 30, 1891, when the Czarovitch, on his way around the world, visited Vladivostok and drove the first spike. It was then thought that the Trans-Siberian could not be completed till 1905 or 1907. That was before the Chino-Japanese War, and a route had already been mapped out along the southern portion of Siberia to Vladivostok, a port on the Pacific just north of Korea that is ice-bound all winter. This port was practically the only outlet for Russia on the Pacific, and accordingly great outlay was made for piers, ice-breakers, etc.

But after Russia's aid to the Chinese in the war with Japan, China felt very grateful, and as a mark of esteem gave her benefactor great privileges in Manchuria, among which were the rights to build the Chinese Eastern Railway and to lease Port Arthur as its eastern terminus. This port is open the year round, so Russia at once gave up her other surveys along the Amur River, and instead began to throw out a line of roads to the south-east through the most fertile part of China, to end at Port Arthur, and with branches to Pekin and Vladivostok.

The Trans-Siberian Road.

This road is practically complete, and after an expenditure of \$150,000,000 has a through line from Irkutsk, on Lake Baikal, extending 4,000 miles to St. Petersburg. Across the lake to Missoyaga trains are being carried on great steel barges or ferryboats. Beyond this

point the road runs in more or less complete state in an easterly direction to Stretinsk, and from the port at Vladivostok directly northward to Khabarovka. The country lying between this latter point and Stretinsk was to have been covered by a line that would have directly connected St. Petersburg with Vladivostok. But with the donation from China, as said before, this line was abandoned, and now the eastern terminus of the Trans-Siberian route is at Stretinsk, while a little to the south and west of this point, at Kidalova, the main Russian line is tapped by the Chinese Eastern Railway.

Marvellous Bridges.

The work across Siberia was full of difficulties, much of the land never having been traversed by white men before. Convict labor has been used to a great extent, thereby cutting down expense. Expense has not been spared in the least, however, to give good construction, and above all else is considered safety. Bridges that are marvels in civil engineering span numerous rivers between Stretinsk and St. Petersburg, twenty millions having been expended in this line alone.

The largest and most costly of these is the great iron and stone affair that spans a distance of 3,150 feet over the Yenisei at Krasnoyarsk. It stands on five colossal circular stone piers, with matching stone abutments thrown over the river in five spans. The cost was \$2,300,000; the work was designed by Knorre, once a German, but now a naturalized Russian. Another great bridge, costing \$2,000,000, extends over the Obi River at Kolivan. During the winter, when the rivers are deeply

frozen, such parts of the road as yet have no bridges are strung temporarily across on the thick ice, and later are replaced by steel culverts.

Chinese Eastern Railroad.

The work of most interest however, was that upon the Chinese Eastern Railway. Although in direct conjunction with the Trans-Siberian road, this was entirely separate in its finances and outward dealings with the public. In 1896 Russia contracted with China to build a road through Manchuria, guaranteeing that the president should be a Chinaman, and that at the end of eighty years the entire ownership of the road was to pass to China upon payment. The route was at once mapped out, and for rapidity of construction this line holds the record. The work was done by Siberian convicts and Chinese coolies, while almost every tool and modern means of equipment is of American manufacture.

The guards along the route are mainly Cossacks, and they dress half in Chinese and half in Russian costume. The flag of the company is likewise half of one country and half of the other. Of course, the enterprise is wholly Russian; and the result of this enterprise is startling. Cities have grown up all along the country that was formerly wilderness.

To think of the wonderful civilizing effect of this railway is startling. The road covers like a hand 400,000 square miles of rich Chinese territory. The main line extends southwest from Kidalova to Vladivostok, while about midway it is tapped by a directly southern branch at a new town called Habin. From this point it runs to Port Arthur and to Pekin.

European methods are in the main crude along engineering lines, and American enterprise supplied this work with nearly everything from steel for bridges to pick-axes and cross-ties. Rock drills caused a great deal of trouble, however, among the native Chinese and also to some extent among the convicts. It was impossible for these ignorant people to understand the workings of such an engine without visible motive power, and they at once came to the conclusion that the work was done by the white man's "slave devil." The result was that 10,000 workmen struck, and it was only with the greatest difficulty that they were induced to return to work. Eventually they became amused at the workings of the machines, though they still thought them controlled by evil spirits.

The Cape to Cairo Railway.

What has been accomplished by the construction of such a great railway may be shown by noting that Habin, the junction of the two great railways, as well as headquarters of their officers, was not on the map at the close of 1899, and yet it is destined to be the Chicago of northern Asia. Already in this city are magnificent office buildings and dwellings, and broad and electrically lighted streets are being paved in the most approved methods. Palatial steamships arrive and depart daily, and machine shops, banks, ice-factories and other enterprises are numerous. To sum up the gigantic effort, a trip of 10,ooo miles, or nearly half way round the world, can soon be made without changing cars!

Were English capital being invested for the building of the Trans-Siberian

and Chinese Eastern railways, we might see the value of the speculation, for it is only that nation that has colonies scattered all over the globe that will greatly benefit by easy means of communication between them. Russia, however, is not building these great distance-bridging webs of steel for the money there is in it; rather for the purpose of bringing her great domains together.

But if Russia is outlaying millions of capital in a costly venture, England is risking still more in the scheme to build a railway throughout the length of Africa from the Cape of Good Hope to Cairo. Cecil Rhodes, the genius of South Africa, promulgated the idea, and though capital has been scarce for the purpose, yet probably by 1910 the most gigantic of all daring feats will have been completed. From point to point the distance to 1 2 covered is about 6,600 miles.

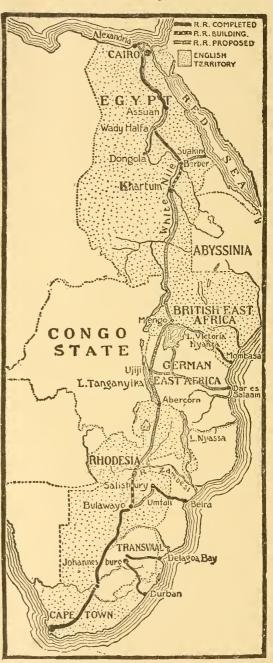
Of this over 3,000 miles is already constructed, but the remaining portion, 3,200 miles, is yet to be strung across the most difficult stretches of land in all Africa. The total cost of the whole enterprise is estimated at \$125,000,000, but as the northern and southern extremities are already laid, it will need only about \$75,000,000 more.

Ninety Miles an Hour.

Speed on railway trains has been developed to at least ninety miles an hour between stops on level road.

This has been done in actual work of carrying mails, and was the outcome of a race against time that took place January 1, 1899, on both the

and Chinese Eastern railways, we | C., B. & Q. and the Northwestern might see the value of the specula- | railways on their respective lines run-



MAP OF THE ROUTE OF THE "CAPE TO CAIRO" RAILWAY.

ning from Chicago to Omaha. With our new possessions in the Pacific Ocean any time saved on the way to the coast is of importance, and it was to secure mail contracts to these points that such speed was shown.

It is no uncommon event to travel at the rate of fifty miles an hour, including stops, but extremely high rates of speed are not usually developed on passenger trains. When ninety miles are whizzing past in sixty minutes it taxes to the utmost the nerves of the engineer. All sorts of sights and noises are magnified in the night, and even if engines are improved to fly at the rate of 150 miles an hour—which it is said will before long be possible—the driver

of the engine would be able to run his train only a few years before he would be a physical wreck.

With the improved headlights shadows are increased, and though the long stream of light aids in detecting breaks on the track at night, such a thing as a small fly travelling over the face of the lamp is enlarged to great size in a shadow on the track. The wind whizzes by, and when another train at an equal speed of ninety miles an hour from an opposite direction passes by, the two are coming together at the rate of 180 miles an hour. With all these strains, the engineer wishes to reduce rather than to increase the speed and thus have fewer risks.

GREAT CANALS OF THE WORLD.

For nearly a century after the discovery of America, explorations were made to find the straits that were supposed to exist between the northern and southern halves of the continent. last, when the Isthmus of Panama was found, engineers at once began to dream of an artificial waterway to link the Atlantic and Pacific oceans. The canal routes that have received the most publicity are those of Panama and Nicaragua. Both of these were under way in 1900, though the Panama had expended the more money and was nearer completion. The United States government interested itself in the Nicacaragua plan, and authorized an expenditure of \$115,000,000 on than route.

The Panama Route.

In 1900 this canal was cut two-fifths of the way across the Isthmus from Colon on the Atlantic side to Panama on the Pacific, and the cost of complet-

ing it was estimated at \$102,000,000. The route at first lay over twenty-five miles of river, eight miles of the Cordilleras mountains that had to be cut down from 100 to 325 feet, and a great part in bottom lands. Great floods of the Chagres River and the opening up of the damp soil causing sickness necessitated the change of route. Estimates showed \$87,000,000 to be necessary for completion, and eight or ten years' time in which to do the work.

The route as laid out is forty-six miles long with the same ports as before, only the Chagres River is not used and in its place canals are to be dug. From Colon fifteen miles is straight cut canal; after that comes a dam which by controlling the waters of the Chagres will flood the country for 13½ miles, with an artificial lake. This lake is to be used as a channel of the canal, and at the other end follows a section of canal five miles long which

is the highest of the whole route, sixtyeight feet above the sea. Six locks altogether control the water between the sections, while another artificial lake nine miles north of the main route, caused by another dam, will supply water in dry season.

The Nicaragua Canal

While well indorsed, this is a great deal more difficult task than the Panama, and but a small part of the work has been done. It is to extend from Greytown on the Atlantic, to Brito on the Pacific, using as main channels Lake Nicaragua and the San Juan River. Six locks control the water, and the hardest part of the plan is to build a series of dams, some of them 6,000 feet long, to check the flow of the San Juan River so that the whole valley will be flooded and make an immense artificial stream connecting with the lake.

Short and steep canals are built at each end of the route and connect the lake and river with the oceans. The route is 169 miles long as compared to forty-six on the Panama, while the summit level, or highest point, is 154 miles long, with one end but thirteen miles and the other two miles from the oceans. Should a break occur in one of the Nicaragua locks, half this stretch would be emptied of water and the vessels in transport would be stranded. With both these routes in construction a waterway across the Isthmus is assured before 1910.

Chicago Drainage Canal.

One of the greatest enterprises in the line of canal building was finished by the Sanitary District of Chicago, and consists of an artificial waterway connecting

the waters of the Chicago River with those of the Mississippi. For years the filth of the Chicago River was such as to give the stream the name of "sewer." The refuse from numerous factories emptied into it, and in heavy weather or after a thaw these waters flowed far out into Lake Michigan, from which Chicago gets its water supply, thus being a great menace to the health of the inhabitants. The opening of this canal effectually turned back the waters of the river from its mouth and made the stream flow towards its source.

Reaches the Mississippi.

Virtually Lake Michigan thus has an outlet to the Gulf of Mexico, the water flowing steadily up the river and out through the cut that joins the river at its south branch and over a rocky bed and between stone walls to Lockport, Illinois, where a great controlling dam is situated that lets the water into the Des Plaines River. From this point the river runs by way of the Des Plaines, through the town of Joliet, to the Illinois River, and thence into the Mississippi.

The canal is 160 feet wide, is made of six-foot thick masonry, and is deep enough to admit ocean vessels, while it has a capacity of 600,000 cubic feet of water a minute. Part of the route lay along clay beds, and here the work of construction was the easiest; elsewhere it lay along solid rock, and here blasting had to be done; another part lay along a prairie, and there a wall of stone thirteen miles long had to be built.

To remedy the sewage problem of Chicago the whole sewer system had to be reversed, and the refuse matter made to flow out to the canal instead of into the lake as before. To do this large intercepting sewers were constructed underground, connecting the larger sewer mains and emptying into the south branch of the river. It took seven years to construct the canal and about \$32,000,000 were expended. The money for this was raised by taxes, but a large income will be derived from the use of power developed by the fall of the water over the dam at the big controlling works at Lockport.

The Keil Ship Canal.

The great ship canal which is destined to connect the Baltic with the Black Sea, work on which was begun in 1898 by the Russian government, has been pushed forward with the greatest zeal and at the same time with a quietness amounting almost to secrecy. When finished the work, on account of its immensity and the almost insuperable difficulties to be overcome, will be worthy of a place beside such modern wonders as the St. Gothard Tunnel and the Suez Canal.

The route unites the River Dnieper, which flows into the Black Sea, with the Dwina, which empties into the Baltic Sea at Riga. It starts at Riga, following the course of the Duna River as far as Duneberg, where it is united

to the Beresina by means of an immense course cut right through the country. The Beresina and the Dnieper are then used to complete the connection. The total length of the line is about 1,000 English miles, one-eighth of the distance being artificially cut through the land.

Dimensions of the Canal.

The canal is about 307 feet wide, and about thirty feet deep, thus allowing the largest vessels means of passing from one sea to the other. Seventeen large ports, or artificial bays, are to be constructed along the line as well, each capable of containing a large number of ships, so that a Russian vessel, however large it may be, may make the entire transit in six days without hindrance of any kind.

The cost of the work, at the lowest estimate, and taking into consideration the means at the disposal of the Russian government as to the adoption of unpaid labor, will amount to about \$120,000,000. The whole passage is kept within the limits of the Russian Empire, thus allowing Russia absolute sovereignty over the entire course. Putting aside the great political advantages given to Russia by the new enterprise, the gain commercially and economically will be an incalculable one.

CHAPTER XXXV.

Progress of Agriculture During the Century.

O department of human activity has shown more rapid and satisfactory progress than agriculture. As compared with the crude ideas, methods and implements that characterized the beginning of the century, the advance exhibited at its close seems almost miraculous. This has been the creative period of agriculture. Original in its movements, it has propounded and settled problems of great moment to civilization. In the rapidity of its advance it has acquired more than during the previous sixteen centuries. A brief review will be given of a few of its lines of advance.

Chemistry had so rapidly progressed that, in 1803, Sir Humphrey Davy delivered a series of lectures to a farmers' club in London, earning thereby the title of "father of agricultural chemistry." Combustible materials were then regarded as the essential elements of plant nutrition, and mineral matters, as mainly of accidental presence in the plant. The next thirty years witnessed developments in the physical sciences, which, coupled with observations of farm investigators, added much to the stock of facts essential to the formulation of general farm laws.

The imperfect methods of plant analysis of Davy's time now assumed a far greater accuracy. In 1835 Boussingault of France founded a private experiment station and carried forward brilliant original investigations touching the chemistry and fertility of the soil and

plant and animal physiology. From 1824 to 1840 the masterly genius of Liebig massed original and acquired data that resulted in announcements, through a work in 1840, of facts which mark an era in farming.

Famous Discoveries.

· The prolific data and broad generalizations of Liebig inspired active investigations which have given an astonishing volume of facts. Between 1838 and 1840 Sir John B. Laws, aided by Dr. Gilbert and ten to fifteen other assistants, began his investigations, now world famous and invaluable. Royal Agricultural Society of England employed, in 1843, Professor Voelker for scientific study of farm questions, and he rendered important service. The Highland Society of Scotland likewise employ an expert. In 1852 the first efficient official experiment station for the study of farm problems was founded in Leipsic, Saxony.

Europe and the United States now boast of several hundred stations, private and public. Each employs from one to five trained investigators. Volunteers, at the agricultural colleges of two continents, swell the list of original workers. No age, industry, or profession parallels the numbers, enthusiasm, and success of these investigators. They are collecting the richest, broadest, and most useful professional literature of the age—the outcome of the most complex of the industries, of

the one which virtually determines the price of food. Investigators in other fields have swelled the volume of facts applicable to agriculture; for chemistry, botany, physiology, anatomy, geology, mineralogy, entomology, and physics are the foundation sciences upon which rational farming is based.

We Know the Soil.

These investigations have made us acquainted with the physical properties of the soil and taught us how to modify them, regulating the amount of moisture by frequent and shallow tillage. They have informed us of the chemical composition of soils and plants and taught us that "all plant food acts through its constituents," which are as valuable from artificial as from natural sources. These have been made available through mechanical and chemical agencies, thus vastly increasing the possibilities of the soil and of population.

Chemistry has enabled us to discover the sources of plant food; it has founded the trade in fertilizers—a trade amounting to millions of dollars in a single State of the United States—and modified the type, while increasing the vigor and efficiency, of European agriculture. It has given us the proximate food constituents of plants and their functions in animal nutrition, enabling us, in connection with discoveries in animal physiology, to formulate a rational system of food combinations which afford for each class of animals, for each specific purpose, enough, and no more, of albuminous and carbonaceous constituents for the desired end. This results in a great saving of food and in the utilization of the poorer classes of foods.

These scientific investigations have

acquainted us, also, with the causes and remedies of many animal diseases, and, through Pasteur's researches, taught us that, through inoculation with weakened virus, certain contagious diseases may be defied. As a result, eighty-five thousand sheep were vaccinated in one department in France. They have given us the life history of fungi and insects and, in fact, the means for combating these destroyers of hundreds of millions of food plants annually.

Nourishment of Plants.

They are now asserting that parasitic growths find their most congenial field with plants whose low vitality results from improper nourishment, and that, by the application of potash salts or other food constituents, health may be restored even to plants affected by yellows or by blight. They have proven that quality in plants is a flexible factor subject to modification by fertilization, by modifying soil, or by the breeder's art. Through these influences, from Napoleon's time, the sugar product from the sugar-beet has been more than doubled in its percentage.

Varieties of fruits, vegetables, and grains have been amazingly multiplied, and edible products have been converted from coarse and flavorless fruits into such as please the palate, thus creating demand. One American tested six thousand varieties of potatoes, which fact serves as an illustration of the work in this direction. The breadth of the acquired facts forbids specializing. They touch every phase of farming, and have modified, or are in the process of modifying every important farm operation.

Astounding as it may seem, this is the first age to acquire exact facts in farming. Knowledge is needed to replace conjecture. Farm facts are farm forces. They broaden the policy and invigorate the system of the farmer. Divorced from tradition and uncertainty, the farmer, relying upon principles in practice, substitutes a vigorous for a timid policy. On the farmer himself the outcome is a happy influence. The unthinking working machine is replaced by the broad, self-reliant director of natural forces and artificial appliances.

New Methods.

This period is marked by a radical change in the character of farm literature. It is no longer an exposition of practices—a list of old processes—merely, but is a teacher of principles upon which good practices may be founded. It is far from being implied that farming is an exact science. It will long remain an art dependent upon acute observation and executive capacity quite as much as on pure science. Wed science to these factors, and an unquestionable gain of power accrues to the farmer; for he who works in harmony with law works to the best advantage. everything else being equal. A few only of the more important works in English, originally or by translation, of the great mass of farm literature due to the period, and which marks the new paths entered upon by agriculture, can be mentioned.

In 1812 Sir Humphrey Davy published the first reputable work upon agricultural chemistry. In 1834 Professor James F. W. Johnson, of Scotland, published a most commendable work, for the day, upon "Agricultural Chemistry," originating in his lectures to a farmers' club. Liebig was the author of a notable work, entitled "Chemistry in its Application to Agriculture and to Physiology." This work had a great reputation and aided in developing general chemistry and physiology, apart from its influence on agriculture. It went through six editions. In 1844 Boussingault's "Economie Rurale" appeared.

Experiment Stations.

Since this formative period of modern agricultural literature a number of important works have appeared, more valuable than those named but of less comparative importance; among these are forty yearly reports of the Royal Agricultural Society of England, containing the original work of its chemist and others. Of a like character are the reports of the Highland Agricultural Society. Darwin's "Plants and Animals under Domestication," and Loudon's encyclopædias of agriculture and of gardening have achieved international reputation.

The experiment stations and agricultural colleges have issued a countless number of phamphlets of experiment work. Boards of agriculture have added libraries of matter, largely compilation, to the general fund of literature. The agency of the agricultural press is daily observed, and displays the reading farmer as a growth of the present generation. A unique feature of the present is the recognition of the farmer as an intellectual factor of the times, by the general press. Most papers now devote a column or more to agriculture, but no stated space to other industries. There

has been a steady increase of attention, on the part of scientific and literary monthlies, to the literature and science of husbandry.

The significance of the growth of farm literature will be better apprehended if considered in connection with the increase of the schools and associations organized in furtherance of industrial education and progress.

Agricultural Societies.

Organizations for the promotion of agriculture had their origin in the previous century, one at its beginning, in Italy, and another in 1723, in Scotland; yet no considerable advancement was made during the eighteenth century. The Highland Society of Scotland, founded in 1783, and the Royal Agricultural Society of England, founded in 1838, have, each, several thousand members, and specialists for original work and fortesting seeds, foods, and fertiliz-Similar societies, lesser and local ones, and fair associations exist in all the continental nations. The board of agriculture established in England in 1793, of which Arthur Young was secretary, has its type in State boards of agriculture in most of the States of the United States, all under State aid.

Farm organizations have flourished best in the United States, where land ownership and education of farmers are more general. Farmers' clubs and fairs are innumerable, and have been effective aids in farm advancement. The Patrons of Husbandry, organized in 1867 in the United States, is the most comprehensive and far reaching organization of farmers ever known; it had, at one time, thirty thousand subordinate branches or "granges," numbering two and one-half great industrial educational movement

million of members. While it has increased the political significance of the farmer, its greatest good consists in its influence upon the social and intellectual growth of the farmer family as the unit of farm life.

Governments Interested.

Central governments, recognizing cheap bread and abundant "materials of art" as the sources of national stability and wealth, have formed, under varying names, at national expense, "departments of agriculture" to promote farming. In France it was organized in 1834 as "Minister of Agriculture and Commerce," and, in 1881, reorganized as "Minister of Agriculture," with departments for forestry, vine culture, etc. Prussia established a "Ministry of Agriculture" in 1848, and Austria did likewise in 1867. Italy appointed a "Minister of Agriculture, Industry and Commerce" in 1883. Lesser continental nationalities give official assistance to agriculture. The United States founded a distinct "Department of Agriculture" in 1862. It issues monthly and annual reports, also special reports of its statistical, chemical, entomological, botanical, and forestry experts.

These general movements mark the growth of a complex and important industry. Founded upon the needs of society and the results of profound scientific research in the natural sciences, the impulse cannot stop short of industrial schools to teach the science and art of agriculture; for the materials of information provoke their systematic study.

In schools of agriculture we have the

of the age, whose culmination is clearly in the future. Prussia, which furnished the destroyers of the old agriculture, erected the first agricultural college, for the agriculture of the new civilization, at Moglin, under Von Thaer's management. It taught mathematics, geology, botany, veterinary science, chemistry, and other sciences. A farm was connected with it for practical instruction. In 1806 Fellenberg founded a school of agriculture in Switzerland. France devoted an old royal palace at Grignan with its lands to the same purpose. In 1815 private funds established the Royal Agricultural College at Circucester, England. A chair of agriculture was established at Aberdeenshire, Scotland.

Thorough Education.

This early movement has been followed by the development of systems of agricultural education in Europe and the United States. In 1862 the United States donated to each State in the Union thirty thousand acres for the founding of agricultural and mechanical colleges. Independent colleges were established by some of the States. Other States made the agricultural colleges departments of elder institutions, while some have entirely ignored the purposes of the donation, and used the funds received to sustain established colleges. The first class, thus far, has achieved the greatest success. The Province of Ontario established an agricultural college in 1874.

Further facts are needless to mirror the grand movement in agriculture in this age in the directions named. Candor compels the statement that agricultural colleges are not the offspring of a wide popular demand, but rather are the children of the discerning few who sought to create by them a popular demand for industrial education by the farmer. The fruition of their hopes has been somewhat deferred, but is assured.

A pioneer movement, it had at first no trained men to guide it. Scholastic men first in charge of the new schools did not comprehend the breadth of the art and science under their charge. They did not at first understand that these schools should maintain the same relation to farming which the medical colleges does to the medical profession, which the law school does to the legal profession, or which the school of engineering does to the art it seeks to give proficiency in; but they assumed that the education of the citizen was the education of the farmer.

Schools of Industry.

It is the work of industrial schools to educate the specialist. With the accumulation of industrial data and experience by the teachers of agriculture, agricultural education has become more permanently industrial and capable of disarming the prejudices of farmers. The problem is not solved. Its blended art and science, the variety of its departments, the complexity of its laws as viewed by the practical farmer—an intellectual and mercantile industrialist—conspire to make agricultural education the gravest education of the age.

It has been asserted that the plow is typical of prevailing civilization; certainly it is of the condition of agriculture. No period of human progress is recalled that was not accompanied by an improved plow. Typical of the art of agriculture, the assertion is safe that

both material and intellectual progress rest heavily upon it. Judge Gould said that "it has passed into a maxim that the plow lies at the foundation of all wealth and is the basis of all civilization." Says another: "When tillage begins other arts follow; farmers, therefore, are the founders of civilization."

Majority of Farmers.

History shows that wherever an indifferent agriculture is prosecuted, there a large proportion of the population is engaged in bread-raising. A small proportion of the population is thus left to prosecute the arts and to broaden intellectual culture. Art and literature require the patronage of a high agriculture, as it is not only the source of wealth but is the greatest purchasing power. Spain, Austria, Russia, Turkey, India, or present Egypt illustrate the influence of a low agriculture on the development of art and literature. The United States, from the start, has proportionally decreased in rural population, and yet has largely increased food exportations notwithstanding the wonderful growth of its manufacturing industries and people.

The century opened with improvements made and projected which practice had not utilized. The progress of the plow, in view of its important relations, will be briefly traced. The wooden plow with mould-board covered with iron straps, with straight beam, iron coulter, and crooked roots tipped with cattle-horns for handles, long held sway against the cast-iron plow that "poisoned the soil," and was not entirely driven from the field until 1850. Its construction and method of use necessitated double the tractive force

required in the use of the steel plow of the present day.

After Jefferson's clear enunciation of the mechanical principle involved in plow construction, the shape of the mould-board gradually improved. Empirical and mathematical tests at length gave a mould-board that kept free of dirt, and rended the soil while perfectly inverting it. The solid cast-iron plow of the beginning of the century was replaced, in 1819, by a plow which was cast in pieces—an invention of Jethro Wood. A little later a single iron truck under the beam was used. In coulters, bridle adjustments, beams, handles, lightness and quality of material, the plow improved until the fifth decade, when its character produced a sharp demand.

New Implements.

The swivel plow, steel plow, double plow, subsoiler, cylinder-plow patterns for various soils, steam plow, double landside plow, sulky plow, screw pulverizer, rolling cutters, all in manifold forms, have kept pace with the march of the industries. Who shall view the polished steel of the modern sulky plow and feel that the plow is not a fit emblem of agriculture and an index of the world's progress? While steam is successfully applied to the plow in England, the fancy may be pleased to note that electricity has been applied to the plow in France by way of trial and also in the United States.

The Reaper is second only to the plow, projected in the last century, the first one in successful use was invented by Patrick Bell of Carmylie, Scotland, in 1826. Better machines were introduced by Obed Hussey in 1833 and by

McCormick in 1834, both of the United States. Improvements continued until 1850, when they first began to come into general use in the United States, where costly labor encouraged them.

Before this the sickle and scythe gathered the grain of the world, and yet do for many peoples. The necessities of the American Civil War brought the reaper rapidly forward. One man, brute force, and mechanism replace, by the twine-binder, eight to ten men with cradles, or many more with the sickle. The plow and the reaper have produced the phenomenal United States, the largest food exporting nation of the world, yet, with very few exceptions, having the smallest proportion of agricultural population.

Great Improvements.

Oxen and cart-wheels, but the flail mainly, continued in use far into the century. To-day the steam thresher goes about from farm to farm, threshing a thousand or more bushels per day. Lesser implements have kept pace with the greater in the multiplication of kinds and forms. The square, woodentoothed, packing, turf-turning harrow of the early part of this period has been generally superseded by harrows of nameless forms of the best materials of the day. The heavy, blunt, iron shovel is replaced by the light, thin, steel shovel; the straight-handled, heavy, flat-tined manure-forks, by the light, oval-tined, crooked-handled fork.

Of the handy, nearly perfect small tools, for every operation of the orchard and farm, it is impossible to speak. The horse hay-forks, the hay-loaders, stackers, grain-drills, planters, horse-rakes, cultivators, and farm wagons

deserve passing notice. The greatest mechanical improvements for the farm have been achieved by the Americans, and by other English-speaking peoples. In Spain, Italy, Austria, and Russia, the awkward tools—even the wooden plow of the eighteenth century—are still seen. The spiritless aims and methods born of the feudal system have left their influence on the agriculture of these countries.

Agriculture in Europe.

Ownership of land and the unlimited opportunities which it gives have aided German agriculture; but, in spite of its stations and colleges of agriculture, it still clings to unwieldy implements. The stimulus of the great markets of England has obscured, in part, the mischiefs of the lease system of its great estates,-four-fifths of England being owned by 7,000 landlords. The Revolution gave France small estates; it has 7,846,000 land-owners. This extreme subdivision of estates hinders the use of the most improved tools, binds a man to a limited circle in the growing of the great staple crops, and, in France, marks his steps with wooden shoes.

Machinery has not only released a large fraction of the farm labor to prosecute other industries and, at the same time, increased the products per capita by performing better work, but has shortened the hours and lightened the labor of the farmer. The losses resulting from old-time practices have thus been avoided; for instance, in past times, haying in New England was not finished until late in September, while now it is generally completed in July, thus saving time, money, and material. Few results of the progress of agricul-

ture, more marked than the contrast between the farm homes of to-day and two centuries ago, are seen. The contrast need not be drawn, for the advance is the advance of general society, the latter being quite as full and commendable.

Machinery for Everything.

Much of the advance of the present times consists in the perfecting of old methods. With better plows we plow better. With concave steel plates which roll on common axes we lighten the soil, without inversion of the turf as by the use of the old square harrow, whose wedge-shaped, turf-turning teeth packed the fine soil.

With machinery we pulverize and spread manure and sow grain more evenly than by old hand processes. With corn-planters one man is enabled to do the work of ten and leave the corn in better position for machinery for after tillage. With the smoothing harrow, with its fine, slanting teeth, sixteen acres of corn can be weeded in a day; while thirty-two men with hand hoes would not stir this surface daily. The economy of shellers, rakes, stackers, and other labor-savers on the farm need not be traced.

The gain is not alone in quantity but extends to quality of work. The management of a field of corn from turf to harvest-time will illustrate the gain in tillage. A sulky plow drawn by three horses and controlled by one driver will often turn three acres a day. The old bar-share plow needed three or four pairs of oxen and as many men for its management in plowing one acre daily.

Machinery plants an acre of corn hourly, while hand-method of planting

required a day or more. One man now cares for fifty acres of corn against three or four by the old order. From sod to harvest, two and one-half days' work are required to raise an acre of corn, while thirteen days' labor were required fifty years before.

Among specific advances may be mentioned drainage, which has improved greatly, and vastly extended in area. Tile drainage is a product of this century and was little known until the middle of it. So firm a footing has it, that the British government loans its credit to private drainage efforts; and in the United States immense capital is invested in this manufacture. The cuitivation of the grasses, also, is a product of modern times having its greatest impetus in the nineteenth century. The great hay grass of the United States, timothy, was unknown to English farms until about 1760. Now we have many species of grasses advertised by seedsmen. We adapt our grasses to soil and purpose of feeding.

Variety of Grasses.

This utilization of the grasses paved the way for the marvellous development of our domestic animals and their products, as seen in the present century. The bony, narrow-loined, thin-thighed, flat-sided steer of the past, requiring five years to mature, has been supplanted by his opposite,—an animal raised in onehalf of the time and at two-thirds of the expense, with the choicest parts developed almost to perfection. Breeding to special purposes has produced in three hundred and sixty-four days a calf weighing twelve hundred pounds; it has intensified qualities and increased prices enormously. In 1810 Collings sold

"Comet," a "short-horn" bull, for \$5,000, the highest price theretofore paid; but, in 1873, Campbell sold, at New York Mills, a cow for \$40,600.

The butter product of cows has probably fully doubled, but this is uncertain. Butter for common use is a product of this age, and is most in use by English-speaking peoples. Americans consume about fifteen pounds per capita. Grass or hay and better breeding and feeding has made this consumption possible.

Famous Sheep.

The merino sheep has certainly doubled its wool product. In 1800 the best bucks yielded only nine to thirteen pounds; now multitudes are shearing ever thirty pounds, while forty pounds is not unknown. The fineness of the fibre has been increased greatly, the number of fibres to the square inch varying from 7,000 to 48,000. These facts may serve to illustrate the advance in interest in the animal kingdom.

In the vegetable kingdom, as already stated, rapid strides have taken place. Chemistry has taught us that liquid manure constitutes one-half of the value of animal voidings, and that the solids suffer from leaching rains. The saving and applying of manures has thus been greatly perfected. Chemistry gave us chemical manures, and from the importation of guano in 1840 their use has grown. Older countries use chemicals very largely.

Seed breeding has multiplied varieties until they are not only nameless in num-

ber and improved in quality, but much superior in prolificacy. Critical experiments have shown that size, density, and parentage affect quantity and quality of product. Darwin and others have shown that crop-fertilized plants, particularly of some genera, are much more vigorous than self-fertilized plants. Hot-house propagation has greatly extended the season which many products can be enjoyed by the masses. Even night has been converted into day by electric light, and plants thereby stimulated into continuous growth, while steam-pipes in the soil have given to it a tropical temperature in January.

A Ruling Power.

When it is considered that the proportion of the population of the United States engaged in the cultivation of the soil is less than in Europe, it will be seen that a divorce from traditionary methods and a free use of improved machinery are doing much for agriculture. The proportion engaged in agriculture is constantly decreasing in this country, yet improved machinery has increased constantly since 1840 the grain grown per capita of total population.

Agriculture is known as the "conservative" industry. It is all a mistake; the world cannot advance faster than its agriculture. The accumulated facts of the past have been grouped, and from them has been evolved a more comprehensive system of farming than has ever prevailed, involving a more rational system of crop rotations and stock management.

CHAPTER XXXVI.

Review of the World's Scientific Progress in the Nineteenth Century.

HE wise and the foolish, the learned and the unlearned, the poet and the pressman, the rich and the poor, alike swell the chorus of admiration for the marvellous inventions and discoveries of our own age, and especially for those innumerable applications of science which now form part of our daily life, and which remind us every hour of our immense superiority over our comparatively ignorant forefathers.

But though in this respect (and in many others) we undoubtedly think very well of ourselves, yet our self-admiration does not rest upon an adequate appreciation of the facts. We must understand the altogether exceptional character of our advance in science and the arts during the nineteenth century. In order to estimate its full importance and grandeur—more especially as regards man's increased power of nature, and the application of that power to the needs of his life to-day, with unlimited possibilities in the future—we must compare it, not with any preceding century, nor even with the last millenium, but with the whole historical period-perhaps with the whole period that has elapsed since the stone age.

Having thus indicated our standpoint let us proceed to sketch in outline those great advances in science, the arts and literature, which are the glory of the century. In the course of our survey we shall find that the more important ing is to thought.

of these are not mere improvements upon, or developments of anything that had been done before, but that they are entirely new departures, arising out of our increasing knowledge.

Taking first those inventions and practical applications of science which are perfectly new departures, and which have also so rapidly developed as to have profoundly affected many of our habits, and even our thoughts and our language, some of which have been fully described in preceding pages, we find them to be thirteen in number.

- I. Railways, which have revolutionized land travel and the distribution of commodities.
- 2. Steam navigation, which has done the same thing for ocean travel, and has besides led to the entire reconstruction of the navies of the world.
- 3. Electric telegraphs, which have produced an even greater revolution in the communication of thought.
- 4. The telephone, which transmits, or rather reproduces, the voice of the speaker at a distance.
- 5. Friction matches, which have revolutionized the modes of obtaining fire.
- 6. Gas lighting, which enormously improved outdoor and other illuminations.
- 7. Electric lighting, another advance, which bids fair to supercede gas.
- 8. Photography, an art which is to the external forms of nature what printing is to thought.

- 9. The phonograph, which preserves and reproduces sounds as photography preserves and reproduces forms.
- 10. The Roentgen rays, which render many opaque objects transparent, and open up a new world to photography.
- 11. Spectrum analysis, which so greatly extends our knowledge of the universe that by its assistance we are able to ascertain the relative heat and chemical constitution of the stars, and ascertain the existence, and measure the rate of motion, of stellar bodies which are entirely invisible.
- 12. The use of anæsthetics, rendering the most severe surgical operations painless.
- 13. The use of antiseptics in surgical operations, which has still further extended the means of saving life.

None to Compare.

Now, if we ask what inventions comparable with these were made during the previous (eighteenth) century, it seems at first doubtful whether there were any. But we may perhaps admit the development of the steam engine from the rude but still useful machine of Newcomen to the powerful and economical engines of Boulton and Watt.

The principle, however, was known long before, and had been practically applied in the previous century by the Marquis of Worcester and by Savery; and the improvements made by Watt, though very important, had a very limited result. The engines made were almost wholly used in pumping water out of deep mines, and the bulk of the population knew no more of them, nor derived any more direct benefit from Them than if they had not existed.

In the seventeenth century, the one great and far-reaching invention was that of the telescope, which, in its immediate results of extending our knowledge of the universe and giving possibilities of future knowledge not yet exhausted, may rank with spectrum analysis in our own era. The barometer and thermometer are minor discoveries.

In the sixteenth century we have no invention of the first rank, but in the fifteenth we have printing.

Mariner's Compass.

The mariner's compass was invented early in the fourteenth century, and was of great importance in rendering ocean navigation possible and thus facilitating the discovery of America.

Then, backward to the dawn of history, or rather to prehistoric times, we have the two great engines of knowledge and discovery—the Indian or Arabic numerals leading to arithmetic and algebra, and, more remote still, the invention of alphabetical writing.

Summing these up, we find only five inventions of the first rank in all preceding times—the telescope, the printing press, the mariner's compass, Arabic numerals, and alphabetical writing, to which we may add the steam engine and the barometer, making seven in all, as against thirteen in our single century.

Coming now to the theoretical discoveries of our time, which have extended our knowledge or widened our conceptions of the universe, we find them to be about equal in number, as follows:

I. The determination of the mechanical equivalent of heat, leading to the

great principle of the conservation of energy.

- 2. The molecular theory of gases.
- 3. The mode of direct measurements of the velocity of light, and the experimental proof of the earth's rotation. These are put together because hardly sufficient alone.
- 4. The discovery of the function of dust in nature.
- 5. The theory of definite and multiple proportions in chemistry.
- 6. The nature of meteors and comets. leading to the meteoric theory of the universe.
- 7. The proof of the glacial epoch, its vast extent, and its effect upon the earth's surface.
 - 8. The proof of the antiquity of man.
- 9. The establishment of the theory of organic evolution.
- 10. The cell theory and the recapitulation theory in embryology.
- II. The germ theory of the zymotic diseases.
- 12. The discovery of the nature and function of the white blood-corpuscles.

Turning to the past, in the eighteenth century we may perhaps claim two groups of discoveries:

- I. The foundation of modern chemistry by Black, Cavendish, Priestly and Lavolsier; and
- 2. The foundation of electrical science by Franklin, Galvani and Volta.

The seventeenth century is richer in epoch-making discoveries, since we have:

- 3. The theory of gravitation established.
 - 4. The discovery of Kepler's laws.
- 5. The invention of fluxions and the differential calculus.
- 6. Harvey's proof of the circulation of the blood.
- 7. Roemer's proof of finite velocity of light by Jupiter's satellites.

Then, going backward, we can find nothing of the first rank except Euclid's wonderful system of geometry, derived from earlier Greek and Egyptian sources and perhaps the most remarkable mental product of the earliest civilizations; to which we may add the introduction of Arabic numerals and the use of the alphabet. Thus in all past history we find only eight theories or principles antecedent to the nineteenth century as compared with twelve during that wonderful century alone.

ASTRONOMY IN THE NINETEENTH CENTURY.

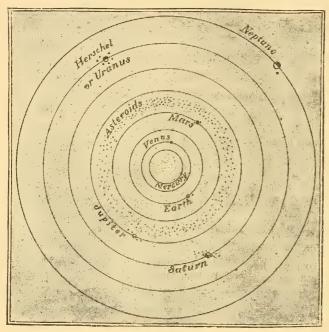
Astronomy in the nineteenth century not only successfully cultivated, but greatly enlarged, every field of investigation which it inherited from the preceding century. The instruments and methods of research were greatly improved and to them have been added celestial photography and spectroscopy, which are destined to prove no less potent and efficacious than the telescope.

valuable adjunct to the telescope, and the application of the spectroscope has not only ratified the ideas of preceding centuries as to the constitution of the universe, but has created an absolutely new branch of science—that is to say the chemistry of celestial bodies.

Let us begin with our globe; its form and dimensions have been determined as much by means of vast geodetical measures as with the aid of pendulum Photography has shown itself to be a experiments, and have been reduced

to an unhoped for degree of precision.

It has been proven that the axis of rotation of the earth is liable to small periodical movements in reference to the mass of the earth itself; in other words, that the positions of the two terrestrial poles are not fixed, but shift from place to place at irregular inter-



SOLAR SYSTEM.

vals within an area of from fifteen to twenty meters in diameter.

The complete study of these movements and the determination of the causes upon which they depend are as yet in a state of rough draft, and the ultimate solution of the problem is reserved for the astronomers of the coming century.

The movement of the moon around the earth, which was considered by the astronomers of the preceding century as one of the most difficult problems to be investigated, still preserved this preeminence in the nineteenth century. Astronomers and mathematicians of great renown devoted to this problem the best part of their lives.

And although, thanks to their gigantic efforts, the tables which are used in the calculation of the movements of the moon have reached a high degree of precision, nevertheless we have not

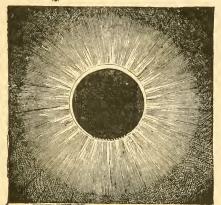
made such progress as might have been expected. On the other hand our topographical knowledge of the lunar surface has been greatly extended, inasmuch as of all the planets the moon is that to which photography may be applied with the best results.

Regarding the physical constitution of the sun very little was known at the end of the eighteenth century. The scientists of that time had but superficial knowledge regarding the sun spots and their periods of rotation. A rational study of the solar surface and of its atmosphere did not be-

gin until the year 1842, with the discovery of the protuberances and of the solar corona.

These studies were at first limited to the short instant of total eclipses, but the continued application of photography and spectroscopy very soon offered the means of uninterrupted investigations of the sun's surface. It was found that the sun spots have not the same period of rotation in the different distances from the solar equator; that their frequency and distribution are not stable, but follow a period of eleven and one half years. It has also been ascertained that these periods correspond to equal intervals in the magnetic phenomena of the earth with variations entirely parallel.

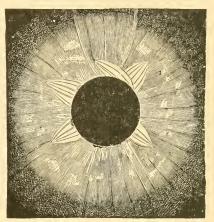
Many attempts have been made by various methods to determine accurately



THE SUN ECLIPSED.

the average distance of the earth from the sun; a distance which constitutes the fundamental unit of measure of the solar system and generally of all astronomical distances. The numerous and expensive expeditions into different regious of the world for the observation of the transit of Venus in the years 1874 and 1882 were not so successful as we had the right to hope. It is nevertheless certain that even on this subject progress has been made by the application of other methods, and especially by means of the parallax of some of the smaller planets. To the twentieth century will be reserved the attaining of a greater degree of precision, and this is made possible by the discovery of the mall planet Eros, which is nearer to the earth than any other planet known.

The theories of planetary movements, according to the principles of universal gravitation, have made great progress, and the tables of these movements have been brought to a very high degree of precision. The theory of gravitation has been sufficient to account for all



REMARKABLE CORONA.

observed movements, with the exception of those of Mercury, which still shows some variations, the cause of which is not known. A great and celebrated triumph of that theory was the discovery of the planet Neptune, by the use of the telescope upon indications given by the perturbations exercised by this planet upon Uranus.

Another important addition to the astronomical knowledge of the nine-teenth century has been the discovery of the so-called asteroids which circulate between the orbits of Mars and Jupiter. The number of these now known is a little less than five hundred, and its is probable that a great many more will be discovered in the twentieth century.

PART VI. RELIGION, LITERATURE AND ART

IN THE

NINETEENTH CENTURY.

CHAPTER XXXVII.

Christianity in the Last Hundred Years.

E have already seen the wonderful progress that has been made during the century in every department of human effort relating to industrial science, the growth of nations, the struggle for equal rights, the victory of man over the forces of nature, and the application of those forces to our daily necessities and comforts. The record is a marvellous one and we cannot help asking whether it is likely to be repeated in the century to come.

We are now to take a step forward, and notice that equal advancement has been made in the progress of Christianity and its beneficent influences and institutions. A spirit of skepticism overspread our land during the first two decades of the nineteenth century. It was largely the result of the French Revolution and the writings of such men as Voltaire and Thomas Paine. The young men of our educational institutions were more than free in their religious opinions, and there was great need of a revival of the faith once delivered to the saints.

Looking back, now, upon the last hundred years, we discover a wonderful change. Great champions of the Christian faith arose like giants from their slumbers, attacked the forces of darkness and infidelity, and emerged from the storm of battle carrying with them their banners of triumph. These honored names are too many to even be mentioned here, but our country and the world at large owes them a debt of unbounded gratitude.

Great Missionary Zeal.

The remarkable progress of Christianity may be seen, first, in those missions to heathen communities and nations by which the evangelical churches have been especially distinguished. The Moravians, or Church of the Brethren, although only a small body of Protestants, is celebrated for its missionary spirit. In fact, it is hardly too much to say that the church exists solely to exhibit this spirit.

Their first mission—that to the West Indian slaves—was started in 1732, and soon after this stations were established in Greenland, Lapland, North and South America, South Africa and other countries, and enthusiastic Brethren tried even to convert the Gypsies. The larger part of the missionary work, however, done by the Moravians comes within

538

the limits of the last century. This work has been such as to receive the highest commendation on account of the great zeal displayed, the self-sacrifice involved, and the results that have been obtained. As an example of the kind of work the Moravians are ready to undertake, it may be stated that they have had an important leper mission in Jerusalem since 1867. No work more dangerous or self-denying than this could be imagined.

During the century the Church of England, the English Nonconformists and the Scotch churches of every name have had their mission stations in many parts of the globe, and these have evoked the greatest religious enthusiasm, men and money having been furnished lavishly to advance the cause which they represent. The London Society was founded in 1795, the Baptist in 1792, and the Wesleyan in 1817. Thus it will be seen that the work of the last three organizations has nearly all been done in the nineteenth century.

Famous American Board.

The Americans have not been behind in the endeavor to extend the influence of Christianity. The American Board of Commissioners for Foreign Missions was founded in 1810 by three young men who were moved to do something for the enlightenment and conversion of the heathen. The amazing influence and results attending the labors of this institution are a theme for wonder. In the ninety years of its existence it has received in voluntary offerings more than \$31,000,000. The twelve colleges of the Board have an average attendance of more than 2500 pupils.

The number of Protestant missionary

organizations laboring within the Chinese Empire in 1900 was upwards of 50, with about 2500 missionaries, 5,000 native assistants and more than 80,000 communicants. There were between 30 and 40 Protestant organizations engaged in missionary work in Japan, with a total membership of upwards of 40,000.

What Figures Show.

The statistical reports of the United States, Canada, Great Britain, Germany, Continental Europe (except Germany), Asia, Australia and Africa in totals were: Number of societies engaged in work, 242; stations, nearly 5,000; out stations, about 15,000; missionaries, 11,900; native laborers, 68,000; communicants, 1,550,000; under instruction, 811,000; income in dollars, \$16,-244,370.

The Scottish missions differ from the others in this, that they are conducted by the churches as such, without the intervention of societies. The Established, the Free, and the United Presbyterian Churches, have extensive missions in India, Africa, China, the South Seas and Japan. The English Presbyterian Church has an extensive and successful mission in China. The Presbyterian bodies cherish the memories of Duff, Wilson and Anderson in India, and of William Burns and Carstairs Douglas in China, who are among the renowned missionaries of the century. The Missionary Society of the Church of England has an income more than twice that of any other English society.

These facts are sufficient to prove that a large part of religious life at the present time expends itself in missionary work. The significant events of the age are not the building of battleships, the conflicts of navies or the march of armies, but the quiet, zealous, selfdenying and persevering efforts of those devoted men and women who, in dark and desolate places, are spreading the light of Christianity, and laying the foundations of civilization and of future republics and empires.

Medical Missions.

Certain phases of this great work are worthy of consideration, and some of these have become prominent within the brief space of a few years. The mode of carrying on missionary operations by the various bodies already referred to is essentially one, though, of course, modified by circumstances. For example, medical missions have been found to be invaluable, and in some instances an indispensable adjunct to the other agencies.

The missions of the Scottish churches have employed education as an evangelistic power to a greater extent than the other bodies. Such institutions as the Christian College at Madras, the mission station at Blantyre, and the Free Church Institution at Lovedale in South Africa, are producing a great effect on the minds of the people.

After all, the most that can be said is that a beginning in Christian missions has been made, the ground has been somewhat cleared, and the way prepared. The actual population of the world may be taken in round numbers as 1,500,000,000, of whom only about 400,000,000 are professedly Christians. Thus, not so much as a third part of the world is evangelized. The hopeful aspect is that the nations of the East

changes must come in China, Japan, India and other parts of the Orient.

While so much can be said for the burning zeal of the Protestant churches in extending the domain of Christianity, it must be remembered that the great Roman Catholic Church has not been one whit behind in its irrepressible efforts to lengthen its cords and strengthen its stakes. Its missionaries, baptized with holy ardor, have really been the pioneers of civilization, and have been found in the distant islands of the sea. in the wilds of Africa and among the frozen snows of the Polar regions.

Notable Record.

The missionary zeal of the Papal Church can be traced far back of the nineteenth century, but in the last hundred years it has flamed out with a brilliancy seldom known before, and has partaken of the active spirit of the age. Among the Indians of the wilderness, on the banks of streams never yet stirred by navigation, in the snows of the far North and along the outskirts of new settlements, the heroic missionaries of the Papal Church have toiled, suffered, and, like their Protestant brethren, have died when necessary for the great cause to which their lives were devoted.

The wonderful advance of Christianity during the century is also seen in the rise and growth of Sunday-schools and organizations for calling out the energies and zeal of young people. Up to 1780 Sunday-schools were unknown. At the end of the nineteenth century it would seem impossible for any church to exist without a Sunday-school for the religious education of the young. are waking up, and before long great Look out upon some anniversary day,

such as has been celebrated in Brooklyn for many years, and see the tens of thousands of children all marching under one gospel banner and all members of one great army.

One hundred years ago no such sight could have been witnessed, and it is hardly too much to say that the wildest dreamer would never have predicted it. The century has taught the profound lesson that the young are the hope of the church and the world. With all the advantages of secular education, they are unfitted for citizenship and the noblest callings of life without religious training.

Army of Waifs.

Consider also that great miracle of missionary work seen in all our large towns and cities from one end of the continent to the other. The ragged, the dirty, the maimed, the halt, the blind, the whole vast army of waifs that prowl in the city gutters, are gathered into mission schools, while their teachers come from wealthy avenues and mansions. In this way does the religious life of our city churches exercise itself, and every town is covered with a network of religious organizations and is brought within the sphere of Christian influence.

In fact, it has come to be admitted that any city church with abundant wealth that is not thus reaching down into the slums in search of jewels that otherwise would be lost is not fulfilling its duty and is a fit subject for reproach. All this has come about during the last half of the century, and is a striking testimony to the leavening power of Christianity and its recent growth.

accommodations in comparison with the population of our country. Here we shall have to refer to different denominations. Reliable authorities estimate that the five largest denominations comprise fully 60 per cent. of the entire number of communicants; the ten largest would comprise 75 per cent. In the matter of communicants the Catholic church is first of the denominations, with 7,510,000, but vastly inferior in number to the whole body of Protestants. The second denomination is the Methodist, comprising all bodies of that name, with 5,405,-076. The Baptist ranks third, with 3,717,373. The Presbyterian is fourth, with 1,278,332; the Lutheran fifth, with 1,233,072. These are the five largest denominations, embracing communicants or church members only.

Church Statistics.

But every denomination has its constituency, so to speak, its adherents who form a population by themselves. It is customary to allow two and onehalf adherents for each communicant or church member. This would make the Methodist population 18,918,446; the Baptist, 12,990,805; the Presbyterian, 5,525,162; the Lutheran, 4,358,752. Thus in these five denominations 50,-000,000 people are included, with a Catholic population of 7,510,000.

These figures are interesting as showing the remarkable advance that the Christian religion has made up to the present time and the amazing power it wields. Only a certain proportion of church communicants approach the Christian ideal; many carry the name yet do not seem to be in the possession Take into account also the church of that for which the name stands, yet

throughout Christendom greater advance has been made in the cause of religion during the century than during any previous hundred years since the advent of Christ.

It will doubtless be interesting to the reader to pursue the matter of religious statistics a little farther, as showing the present strength of the churches of America. It would add to the interest if we had statistics going back from year to year to the beginning of the century, but no carefully compiled statistics were furnished until the census of 1890. Subsequent to that time we have to rely for facts and figures upon religious journals.

We may conclude that the following summary is very nearly, if not quite, correct: Churches in the United States, 189,488; ordained ministers, 114,823; members or communicants, 15,217,948; religious organizations of various descriptions, 158,695. The seating capacity of churches may be put down as 43,000,000, while in the 23,000 places where organizations which own no edifices hold their services accommodations could be found for 2,250,000 more.

Church Property.

The value of church property reaches the enormous sum of \$670,000,000. This is a vast amount of money and is rapidly increasing. Wealthy congregations take a pardonable pride in erecting splendid edifices equipped with all the comforts and appliances necessary for Christian worship. In a sense this is a grand exhibition of religious devotion. It is estimated that at least \$10,000,000 are raised yearly by Protestant churches for missionary work, while at the same time the Catholic church carries on its

various enterprises at large expense and with untiring zeal.

Look next at the great humanitarian movements by which the closing century has been distinguished, all of which are the outgrowth of Christianity and the teachings which date back 1900 years. What victories have been gained in the bloody, yet heroic, struggle for equal rights among men. How the shackles have been stricken off from the oppressed and the great principle of human, brotherhood has been taught, and has been made to take the place of the old barbaric idea that might makes right and the strongest man is the best man.

Humanity a Brotherhood.

Here is a field for human contemplation that can arouse all the impulses of the human heart and mind. This great distinctive truth of Christianity, that humanity is one vast brotherhood, has gained ground at a surprising rate during the last hundred years. To be sure, there are still wars and rumors of war, bloody conflicts and the slaughter of God's image made in flesh, but the real question to be considered is, what does the sense of humanity say to all this? There is a deep and horrible aversion to all war which has grown to such an extent as to make itself felt in palaces and halls of legislation.

This cannot be doubted when we consider the extent to which arbitration is recommended by the foremost minds of our generation for the settlement of disputes between nations. Not the least of the glories of the nineteenth century may be found in those triumphs of the principle of arbitration by which, without the sword, and in the spirit of

brotherhood, vast issues have been decided, which otherwise must have been fought out on battlefields soaked with human blood.

It is of great interest to note in this connection the now famous peace proposition of the Emperor of Russia made in 1899. The civilized nations were surprised at the action taken by the Emperor, considering that Russia has always been an aggressive, warlike, and as some would say, greedy power. The object aimed at by this autocratic ruler was the bringing of war to an end in the whole earth and inaugurating a reign of peace. That a government so despotic and unprogressive as that of Russia should announce and advocate the foremost idea of the age was considered remarkable.

The Emperor's Call.

In accordance with the wishes of Emperor Nicholas II. a peace conference was convened at the Hague in the spring of 1899. The call for this conference was based on a proposition handed to the representatives of foreign governments at St. Petersburg and was in part as follows:

"The maintenance of general peace and the possible reduction of the excessive armaments which weigh upon all nations present themselves in existing conditions to the whole world as an ideal toward which the endeavors of all governments should be directed. The humanitarian and magnanimous ideas of His Majesty the Emperor have been won over to this view in the conviction that this lofty aim is in conformity with most essential interests and legitimate views of all the powers; and the Imperial Government thinks the present moment would be favorable to seeking the means."

After stating the case with remarkable force and describing the appalling conditions in which all civilized nations are placed by being compelled to maintain large standing armies, and by the direful results of war when it comes, a proposition for a conference of all the great powers was made and the hope was expressed that it would result in securing the end in view.

Peace Conference.

The conference was held, and was an imposing body, made up of distinguished representatives from the leading nations of the world. The spirit that pervaded its deliberations was admirable, but these did not produce the result that had been hoped for. The conference did, however, adopt a scheme of international arbitration and recommended it to their respective governments. In all this there is a promise for the future, and it is generally conceded that under the circumstances much was accomplished toward not only preventing war but mitigating its horrors.

The thoughtful reader, however, will conclude that it was a sad commentary upon this magnanimous effort in the interest of peace, that upon the very heels of it the war broke out between the British and the Boers, and the same old thunder of guns was heard that echoed over the plains of Europe in the early part of the century, and was heard again in the last half of it, during our Civil War and conflict with Spain. This much may be set down as hopeful, that the great truths of the gospel underlying human brotherhood will yet bring forth "peace on earth."

CHAPTER XXXVIII.

The Century's Progress in Education and Literature.

S late as 1840 woman in the United States was without recognized individuality in any department of life. There was absolutely no provision for her education in anything beyond the rudimentary branches. She was kept closely at home, carding, spinning, weaving, making butter and cheese, knitting and sewing, working day and night, planning and economizing to educate the boys of the family. Such a thing as a career for a woman was undreamed of.

In cases of extreme poverty the girls might go among the neighbors and earn a miserable pittance doing housework or sewing. The boy, at twentyone, was free to carry his labor where it would bring him financial reward. The girls of the family at twenty-one continued to work without wages as before. When they married their services were transferred to their husband. and woman was considered well rewarded by food, shelter and what clothes her husband chose to grant her. Any wages the wife might earn outside her home belonged by law to the husband, no matter what the necessity of mother and children. Woman lost at marriage not only the right to her earnings and property, but also the right to the custody of her person and her children.

No occupations were open to women except cooking, sewing, teaching and factory work. Few women were sufficiently educated to teach. Those who were qualified received from \$4 to \$8 a month and "boarded round," while men for the same service were given \$30 a month and board.

Every woman must marry, either with or without love, for the sake of support, or be doomed to a life of humiliating dependence, living, after the death of parents, in the home of married brother or sister, the drudge and burden-bearer of the family. Women might work like slaves for their relatives, receiving only board and clothes, but the moment they stepped outside the home and became wage earners they lost caste. The woman who dared venture into the field of literature was equally under the ban.

Strange Ideas of Woman.

It was generally accepted that a woman who attempted any vocation outside of domestic service became at once and forever unfitted for the duties of wife and mother. The idea that woman owes service to man instead of to herself, and that it is her highest duty to aid his development rather than her own is the last to die.

In that day not even woman herself had so much as a dream of entering the profession of law, medicine and theology. When the genius of Harriet Hosmer impelled her to take up sculpture she traveled from one end of the country to the other begging for an opportunity to make the necessary study of anatomy. When Elizabeth Black-

well determined to consecrate her life to medicine, not one of the standard medical colleges would admit her as a student, and society ostracized her.

The close of the nineteenth century finds every trade, vocation and profession open to women, and every opportunity at their command for preparing themselves to follow these occupations. The girls as well as the boys of the families now fit themselves for such careers as their tastes and abilities permit. A vast amount of the household drudgery, that once monopolized the whole time and strength of the mothers and daughters, has been turned over to machinery.

A money value is placed upon the labor of women. The ban of social ostracism has been largely removed from the woman wage earner. Woman is no longer compelled to marry for support. Out of 450 of the land's higher institutions of learning, less than a quarter refuse entrance to women. In the world of literature and art women divide honors with men, and the civil service rules have secured for them thousands of remunerative positions under the Government.

What Will She Be?

What the woman of the twentieth century will be we cannot say. One hundred years, with the greater equality, the richer opportunities, certain to come, will make her a being as much nobler, higher and more gifted with every power for good as the woman of to-day is superior in these qualities to her sister of a century ago. The growth of woman means the growth of man: their perfect equality in their respec- Editions of school books from fifty to five

tive spheres, the highest development of the race.

The advance of woman in education and in the enlargement of her opportunities and influence is only similar to the advance that has been made during the century in everything pertaining to education and the enlightenment of the general public. It has been a crowning century in the diffusion of knowledge, the higher forms of mental training, and the methods employed for the successful teaching of the young. There are those now living who can see a marked contrast between the educational advantages of the present day and those afforded in their own youth.

A Flood of Books.

Myriaus of books on every conceivable subject and of every style and description are placed upon the market, are even thrust into the very faces of the reading public, so that the question is not whether one can find the means for becoming well informed on any subject, but whether time can be obtained for studying the works that are at hand. The vast business done by our largest publishing houses would seem almost miraculous to the ordinary reader if it could be examined in all its details.

The great bulk of books in America is published by about one hundred firms in four chief cities. The output is about five thousand titles, in editions of from one hundred to one million copies. Very expensive books are limited to editions of one hundred copies. These are works of fiction, of which from twenty to one hundred thousand copies are sold in a year, and in occasional instances a much greater number.

hundred thousand copies are common enough. The Appletons for many years sold over one million copies of Webster's "Speller" annually, and a Cincinnati firm sold every year over one million copies of a popular series of readers. The American public pays yearly over \$50,000,000 for general literature and school books.

The century brought forth an enormous mass of literature. Novels form the bulk of it. The production of fiction has been phenomenal. It was extremely easy to get a book printed and placed upon the market. Hence writings of every kind and upon every subject abounded. As the end of the century came in sight the demand for books was greater than ever and the flood of new ones was still engulfing the public.

Short-Lived Works.

Of course, the greater part of the nineteenth century will be forgotten. Much of it will live. Much of it that we think will die will be read a long time hence. Much of it that we think will survive the friction of changing tastes and ideas will sink out of sight within a short time. It is difficult to tell at short range just how long a book will live, just what there is in it which makes for permanence.

The only method by which we can form any sort of judgment is to analyze the books which have stood time's test and see, if we can, what their qualities are, and compare those qualities with the characteristics of present day literature. It is much more difficult to do this, however, than it is to describe the process, so people will have to wait and see in most cases.

certain contributions of a distinctly valuable character to the literature of the world. We have created a few forms, we have developed many. We have made some progress in thinking, but we have added few ideas which are fundamentally new. We have found some new materials and we have utilized them. We have some geniuses, and, as is always the case, when genius appears, noteworthy results have followed.

Admirable Histories.

What may be considered the most striking and distinctive contribution of the nineteenth century to literature is in the writing of history. The advance has been notable. Before this century, and even during part of it, history writing consisted in narrating the actions of comparatively few people. It told of wars, of politics, of the diplomatic movements of nations, but it did not tell of what the great body of the people were doing, of the underlying influences affecting society. But we have changed all this. America has contributed most to this progress.

Francis Parkman is probably the greatest historian of the century, and certainly John Fiske did splendid work. Professor Fiske wrote history upon scientific lines. He spent many years studying the evolution ideas of Darwin, and later the philosophy of Spencer. As a result he viewed history as an evolution—just what, in fact, it is. This marks an advance in historical literature. It brings us nearer the point we are so rapidly approaching, the realization of an historical ideal.

The century has given us little new The century has undoubtedly made | material in fiction. There has been

some sprendid novel writing. Many of our novelists have been men and women of real genius. But their characters have been stock characters. The English society girl and the romantic hero have been the predominant types. We cannot agree that there was a distinctlively romantic movement at the beginning of the century and that it has been supplanted by realism, which again in its turn is giving away to the historical romance.

The romantic movement was notably predominant in Germany and France in the eighteenth century. Rousseau and the Schlegel brothers were its apostles. The movement sought inspiration in mediævalism, in the symbols of a Christianity that ran to mysticism in the quaint, strictly pre-Raphael art which was supposed to be the result of a simple faith. This was the same movement that has appeared in the so-called Aestheticism of England in the nineteenth century. It appears periodically, just as a realistic movement does. There is nothing in Balzac more realistic than Scott's treatment of the common people and certainly Zola is at times as romantic as could be desired.

Writers of Repute.

What new material the century has given to fiction has been furnished by American writers. Joel Chandler Harris, George W. Cable, William Dean Howells and others have taken fresh materials and dealt with them with the genius of artists. Their work will live when much that is now popular of the writings of Englishmen will have been entirely forgotten. The writing itself of the Americans may not be so good,

superior to anything new which England has given us.

It is impossible to say who has been the greatest story writer of the century. There has been much fiction produced which will live because it is literature, not because its material is new or its treatment novel. This is the kind of work Hawthorne did, and for that reason he stands out as one of the great writers of the century.

Great Authors.

Many would say that Scott was the greatest writer of the century. Scott was a careless writer and the construction of his novels was bad, but he did three notable things—he put into literature the delightful folk-lore of his own Scottish country, he portrayed in a way pleasing to readers the chivalric hero of mediæval times, and, what is always popular, he told a story. He was a born story teller. These characteristics made Scott read when he first published his novels, they make him read to-day.

Thackeray was one of the first to depict real society life. His people live and move. You feel that you would like to know them. He was intensely real. He was a genuine humorist, and in many respects England's greatest story teller.

Dickens was a humanitarian. was one of the first of reformers, one of the first to make of fiction a great reforming influence. But many of his characters are artificial. They are stage people, clever, interesting and delightful. We would not do without them. We cry over them and we laugh at them. But they are acting, neverthebut the treatment and the material are less. They are not the real people Thackeray makes his readers acquainted with.

George Eliot developed the possibilities of the introspective novel. The influence of Lewes upon her must be noted, as it was probably upon his suggestion that in her later writings she carried the philosophical novel to such an unprecedented point. Kipling was the most notable novelist at the end of the century. He dealt with so much of our very modern life that we cannot judge what place either that life or the depiction of it will take in the estimation of those who are to come after us. He certainly is powerful and possesses a directness of expression that is wonderfully effective. But at times he lacks taste; at times he is careless.

Essay Writing.

The century developed a complete and radical change in the essay. The essay of Bacon, latterly evolving into the essay of Swift, and then of Lamb, we have no more. The material which in former periods we would put into essays now goes into nove is or histories. Stevenson and the other modern essayists write an entirely new form of literature. There are a few good living essayists and several of them are Americans.

The century has developed very few great American novels. The reason is that before the Civil War this country was largely under the literary domination of English writers of the eighteenth century. In the South very few writers of this century were read. It is hard to overcome the effects of a matter of this kind. Whether the great American novel will appear in the next century, would be very hard to say. A genius

is possible at any time, however, and when the proper sort of a genius appears we will have our great national work of fiction.

Much that is Good

It is too early to say how our century will rank with the other centuries in the world of letters. We have not made so very much real progress. Whenever we read Plato it seems as if it might have been written in our own time. It will be a long time before we get beyond Job and Homer. The standards of literature are fixed and have been fixed for ages, just as have those of painting and sculpture. We have given the world a great deal that is good, but there is an enormous amount of trash for which we will have to be blamed.

The trend of the end of the century is to put literature upon a commercial basis. Publishers order books of certain lengths, to be produced within a certain time. Literature cannot be produced in this manner. Genius works in its own way and not according to the orders of publishers. Whether this somuch-a-line method will produce good results is extremely doubtful. The increase of education will enormously increase the demand for reading. Whether this demand will in the main be largely supplied by the old writers or whether the new authors will rise to it is a question for the future to settle.

It is evident that from year to year American authors are forcing themselves to the front, and by their admirable productions are taking higher rank in the world of letters. The reading public judges for itself, and it no longer requires the stamp of foreign approval before forming an opinion of any work.

IMPORTANT EDUCATIONAL EVENTS OF THE NINETEENTH CENTURY.

- Government for Ohio public schools.
- 1805—New York the second State in the Union to establish common school fund.
- 1806—First evening school, Bristol, England.
- 1809—Ohio State University founded.
- 1809 University of Berlin founded, with freedom of teaching.
- 1814-Norwegian Storthing first interests itself in education.
- 1815—Compulsory education in Prus-
- 1817—First institution for deaf-mute instruction in the United States, at Hartford, Conn.
- 1820—School books furnished free in Philadelphia schools.
- 1824—Rensselaer Polytechnic Institute in Troy, first in United States.
- 1825—Braille system of printing for the blind.
- 1826—Frobel's "Education of Man" appeared.
- 1833—Universal education law, France.
- 1833—First aid to schools by British Parliament.
- 1834—Common schools established in Pennsylvania.
- 1835—Sewing taught in Boston schools.
- 1836-Mount Holyoke Female Seminary founded.
- 1837—Horace Mann becomes secretary of Massachusetts Board of Edncation.
- 1837—First School of Design in England.
- 1838—First Normal School in United States, Lexington, Mass.

- 1803—Land grant by the United States | 1840—First kindergarten, near Rudolstadt.
 - 1840—Textbook reforms in the United States.
 - 1842—Universal free education in Sweden.
 - 1848—Entire Bible printed for the blind,
 - 1849—First woman to receive medical degree.
 - 1853—Antioch college; co-education.
 - 1857—National Teachers' Association organized; afterwards became National Educational Association
 - 1861—Vassar College founded.
 - 1863—First cooking school founded in London.
 - 1867—Department of Education established in United States.
 - 1868—First laboratory instruction in mechanics, Imperial Technical School, Russia.
 - 1870-Union College of Law, first woman graduate.
 - 1870—Elementary educational act, Eng-
 - 1872—University extension, Cambridge, England.
 - 1873—Kindergartens in United States, at St. Louis.
 - 1874—First Chautauqua Assembly.
 - 1876—Manual training schools established, Sweden.
 - 1878—University of London admits women.
 - 1879-Manual training in St. Louis schools.
 - 1880—Cooking taught in Boston public schools.
 - 1881—First trades schools in United States, at New York.

1893—Summer meeting for University Extension held in Philadelphia.

1882—Compulsory education in France. | 1900—Kindergarten schools in operation throughout the United States.

UNIVERSITY EXTENSION.

The purpose of the University Extension movement, which was originated by the University of Cambridge, in England, and subsequently spread to the United States, is to provide the means of higher education for persons of all classes and of both sexes engaged in the regular occupations of life. It is intended for all who are willing to give some of their time to study and instruction under the guidance of men who have had university training. offers:

Advantages Offered.

First—Education by means of systematic courses of lectures and classes in the subjects usually taught at high schools and universities.

Second—Illustrated lectures and classes in literature, art, and science, with the purpose of teaching the appreciation of the beautiful, and rendering life more interesting and enjoyable

Third-Lectures and Sasses in history, civics, and economics, designed to aid the citizen in studying the problems of free government and modern life and to encourage a sense of responsibility, habits of sound thinking, and right conduct.

The American Society for the Extension of University Teaching was founded at Philadelphia in June, 1890. objects are:

First—To organize groups of people into centres, and to bring together these centres and competent lecturers, chosen from the list of instructors, whose qual-

ifications to teach have been passed upon by the Society.

Second—To cooperate as far as possible with institutions of learning and other bodies with the purpose of bringing to the many the best thoughts of the few, to keep the University Extension idea before the country by the Society's agents and publications.

In the first year of work twenty-three centres were organized, at which some three hundred lectures were given to an estimated attendance of ten or twelve thousand people. The second season witnessed a satisfactory increase in the number of centres, with a corresponding increase in the number of lectures and students. In the academic year 1893-94 there were given under the auspices of the American Society one hundred and fourteen regular lecture courses, thirty-one class courses, and fifty Summer Meeting courses, or one hundred and ninety-five courses in all, averaging a little over six lectures each.

Rapid Growth.

In the year 1894-95 one hundred and twenty-six regular courses were given, nine class courses, and forty-one Summer Meeting courses, or one hundred and seventy-six courses in all, averaging about six lectures each. Through the "circuit" or union of five or six towns which join to engage the same lecturer, towns distant from University centres have enjoyed the advantages of the system, and even villages of a few

hundred inhabitants have been able to secure courses.

In addition to the winter lectures at the centres, the Society has entered upon two other lines of educational activity. The first is the formation of classes of from twenty to seventy-five members, which, under the direction of its lecturers, engage in the study of history, literature, or civics, through consecutive periods from three to six months. The classes are intended to supplement the work of the "Local Centres" proper, and in places where conditions do not admit of the formation of a centre, to supply, as far as possible, its place. The second is the Summer Meeting, which was started in Philadelphia in 1893, where courses were given during four weeks by some of the most eminent professors of Harvard, Johns Hopkins, Cornell, and the University of Pennsylvania.

The Chautauqua System of Education.

The Chautauqua plan of summer education was inaugurated in 1874. Its originators were Lewis Miller of Akron, Ohio, and Rev. Dr. John H. Vincent, a bishop of the Methodist Episcopal Church. These gentlemen, in August, 1873, selected a site for a summer school on the northern shore of Chautauqua Lake. Here an attractive city of more than five hundred artistic and attractive cottages has been built. There is a well-equipped hotel and various buildings for public exercises, lectures and recitations.

The first assembly began on the first thing to do with the system of farmers' Tuesday in August, 1874, and lasted three weeks. Since then an assembly has been held every year. The Chau- York and for which the State appro-

tauqua Literary and Scientific Circle was organized in 1878, and comprises a system of home reading circles, whose members pursue courses of reading laid out by the officers in books and magazine articles approved by the board of counselors.

The Circle aims to promote habits of reading and study in history, literature, science, and art, in connection with the routine of daily life. The course seeks to give "the college outlook" on the world and life. The essentials of the plan are: A definite course covering four years, each year's course complete in itself; specified volumes approved by the counselors, allotment of time by the week and month, a monthly magazine with additional readings and notes, a membership book with review outlines, and other aid. Individual readers may have all the privileges, and local circles may be formed by three or four members. The time required is about one hour daily for nine months. Certificates are granted to all who complete the course. Seals are affixed to the certificates which are granted for collateral and advanced reading.

Agricultural Education.

As an evidence of the interest felt in agricultural education in the closing years of the century, let it be noted that the State of New York places in the hands of the Agricultural College of Cornell University \$25,000 a year to be used in imparting agricultural instruction to the people on their farms and to children in the schools. This has nothing to do with the system of farmers' institutes, of which some hundreds are held each year in the State of New York and for which the State appro-

priation is very much larger. The movement under the direction of Cornell University is designed to reach the farmers without compelling them to go anywhere or to take any trouble except to absorb what is to be put before them.

There is no other such instance, we presume, anywhere in the world, of paternal care of the State for the farmer. An interesting fact is that this movement did not originate with the State authorities or with the college. It was begun by the farmers themselves in one or two of the counties of the State, who caused the bill to be drafted and sent some of their own number to Albany to promote the passage of the law. For the first year or two the appropriation was \$15,000, to be expended in that portion of the State which had asked for it. Later it was increased and the work made to cover the entire State so far as the money would go.

Instruction on the Farm.

The work has been mainly experimental, as it could not be foretold what methods would produce the best results, or any results which would justify the cost. It is evident that instruction given in this way is very expensive. Mainly the instruction has been carried on upon two lines; first, regular work in the schools, carried on by traveling instructors in connection with the regular teachers, and secondly, by culture experiments carried on by the farmers themselves, also with the assistance of traveling instructors. In the latter case it must not be supposed that young men are sent out to show farmers how to plant seeds, or hoe weeds, or distribute fertilizers. That would be

silly, and great universities do not do silly things.

The work of the instructors in such cases is to show farmers handy ways of so managing their experiments that definite and useful information may be obtained from them. To do this is a profession by itself, which is taught in universities, and which farmers, and other persons not specially trained, do not usually understand, or at all events seldom practice. An important part of the work of such instructors is to collect and preserve the results of these experiments, to be published for the benefit of those who have helped pay for the instruction, but have not directly received it.

The university authorities consider these experiments made on actual farms by actual farmers, but under such supervision that they can be vouched for as accurate, as more valuable to the public than the same experiments made on the college grounds by the college staff.

Agriculture in Schools.

The work in the rural schools has for its object the imparting of elementary instruction to the pupils. If any of our readers are in doubt as to the possibility of really useful agricultural instruction in the common schools, let him who is presumably a graduate of those schools attempt to answer off hand, as he reads this, the simple question: "How do plants grown?" The chances are ten to one that he cannot do it. We see the plants grow bigger day by day, with no thought as to the sources of the additional particles of matter which have become incorporated in the plant, or the operation of the power which removes them from their original seats, lifts them into the air, and perhaps entirely changes their nature. We may easily find a redwood limb cut 100 feet from the ground, which five men cannot lift; how did it get there? It was no small power that raised it. It certainly was not redwood when it went up; how came it to become redwood?

The object of agricultural instruction in common schools is to enable small children to answer such simple questions as these, which their fathers and mothers for the most part cannot answer. The reason why they should be able to answer them is that they may know exactly what helps and hinders growth, and how to cure disease growth.

Thus we find immense progress in education. The school-house forms the great mile-post on the highway of progress. It is everywhere in evidence. Free schools extend throughout the civilized world, and reach upward to a

plane far beyond the highest level of public education a century ago, linking the common school with the college, and forming a direct stepping stone to university education, which has widened out with similar activity. In methods of education a marked advance has been made, while the text-books of to-day are almost infinitely superior to those of the earlier period. And education is turning its attention in a highly encouraging degree towards practical subjects and away from that incubus of the dead languages which was so strenuously insisted upon in the past. Man is going back to nature in education, observation is supplementing book knowledge, and experiment taking the place of authority. In short, education, with its handmaids, the book and the newspaper, is making its way into the humblest homes, and man is everywhere fitting himself for an intelligent discharge of his social, industrial and political duties.

CHAPTER XXXIX.

A Hundred Years of Art.

HERE are great centres of art in Europe, the chief of which, at the close of the century, is Paris, where the schools and facilities for instruction attract students from all parts of the world. Each century adds a superbaccumulation to the masterpieces of painting and sculpture which are the subjects of universal admiration, and the long roll of famous artists is constantly increasing.

Our own country has been considerately excused hitherto for its deficiencies in celebrated art productions on account of its comparative youth and the extraordinary opportunities for acquiring wealth, whereby the energies of intelligent people have been diverted from other pursuits. As the country grows older it is but reasonable to suppose that in art, as in other things, we shall make rapid advances and will not be a reproach to the older nations. Indeed within the last half of the past century we have shown our ability in this direction, and American artists have made enviable names for themselves in European schools and exhibitions.

Pictorial art has had a sudden and rapid development. All classes of books, magazines, and even daily newspapers, are now illustrated. It is found that the public taste demands the object lesson, and the periodical that can furnish it in the most artistic and attractive style is the one that will outstrip all competitors. The discovery of a

process by which photographs can be reproduced in what are called "halftones" has added greatly to the effectiveness of pictorial illustration.

Old-Time Pictures.

In the early part of the century all book illustrations were exceedingly crude, and in many instances little better than caricatures. One would think that a skillful Yankee with a block of pine wood and a jackknife could carve out as good pictures as were to be found in many of the school-books of the day. All along there has been a constant endeavor to perfect the art of illustration, and the success attending this effort has been surprising. Rapid progress has been made, until at the present time no one expects to take up even a penny newspaper without finding a pro fusion of pictures.

And along with this growth of pictorial art the processes by which it is produced have become so cheap as to bring the productions within reach of the universal public. The poorest cottage can have engravings and pictorial works such as were formerly within reach only of the wealthier classes.

In reviewing art in the nineteenth century one is impressed with the steady transition toward the new world of artistic development. History shows us how different countries have their beginning, their growth, and their decline. This has been particularly characteristic in the past century, as in the early cen-

turies, when art in Egypt, Greece and Italy had its rise and fall.

When we look back at 1801 and 1802 we find the most important art figure that of David, who was the first personality whom we recall in modern French art. He was closely followed by Ingres, who was of more marked individuality. The influence of new and original thought was evinced in his work. Academic, but less so than David, he had an infusion of original personality characteristic of much of the thought of his period.

The turbulence of government conditions of France at the opening of the century encouraged an originality of thought that we do not find in the other countries. England was noted at the beginning of the century for its able portraiture, but a strong trace of the eighteenth century was obvious in French art. We therefore watch with deeper interest the gradual development in France.

Rival Schools.

Following closely upon Ingres comes the romantic school, a departure from English opposition to classicism and severity which had replaced the more emotional work at the end of the eighteenth century.

We begin to feel another movement in French art as early as 1820, and a great ethical contest followed between classicism and romanticism. At this time the most distinguished English landscapist, Constable, drank the independent thought that was declaring itself in France.

We now enter upon the greatest period of French art, a period which will be recalled as the most brilliant of artistic productions during the century. The schools of fine art started by Napoleon, which were under governmental protection, were gradually increasing and enlarging, and home patronage became declared. As in this country to-day, so in England and France at the beginning of the century most of the art patronage was spent on foreign artists.

Home Talent.

Both England and France were for many years in the beginning of the century lavish patrons of Italian art, oftener Italian imitation. But in the early 50's we find the eyes of both the French and English people turned upon their home producers. English portraiture is distinctly an exception to this, as royalty had placed its stamp of approval on portraiture from the sixteenth century.

From 1850 on we watch in France, England and Germany the steady and wholesale development in art. The increased wealth and power of these countries led the cultured people to enlarge their taste and add to their collections, it having been proven that financial investments in artistic productions, in painting and sculpture, were wise and remunerative.

We also notice in the 50's and 60's the first evidence of native art production in the United States.

The school of landscape and figure painters of considerable strength and originality had been gradually forming, and prior to and during the war the American artist was generously patronized. The works of many of these men are highly prized by their owners and are gradually becoming the property of local museums.

As we approach the end of the century we feel a distinct decadence in French art, with the exception of its sculpture, which still remains the most remarkable since the Renaissance. The breaking into two factions of the Salon in 1889, the immense and illy-considered patronage of the French painters led to over-confidence and a tendency to sensationalism which has not been for the best in their progress.

Under the wise management of Sir Frederick Leighton, the Royal Academy in England has attained an importance which has made it one of the most powerful art bodies in the world.

Epoch in Art.

The establishment of the South Kensington Department of Science and Art marks an important epoch in the history of art instruction in England. It may be said to have arisen out of the report of a select committee of the House of Commons appointed in 1835 "to inquire into the best means of extending a knowledge of the arts and principles of design among the people (especially the manufacturing population) of the country." On the recommendation of this committee a sum of \$7,500 was devoted to the establishment of a Normal School of Design, with a museum and lectures.

The school was opened in 1837, and by 1851–52 the government grant for this school and its various branches throughout the country had attained the amount of \$75,000. In 1852, in accordance with a report of a select committee, the scheme was reconstructed, and a "Department of Practical Art" created, with Sir Henry Cole as superintendent; and a Science Department was added in 1853.

It was under the management of the Board of Trade till 1856, when it passed under the control of the Lord President and the Vice-president of Council on Education. The South Kensington Museum, founded in 1851, has played an important part in the art education of the country.

Generous Bequest.

In 1869 a great stimulus to art education was given by the foundation, through the bequest of \$225,000 by Felix Slade, of the "Slade Art Professorships" in the Universities of Oxford, Cambridge, and London. These chairs have been held by Mr. Ruskin and other persons of the highest eminence, and it is impossible to overestimate the good which has resulted from this effort to improve the taste and knowledge of the wealthier classes, in whose hands the patronage and direction of art in England mainly rests.

In Scotland, a remarkable effort in the direction of art instruction was made by Robert Foulis, the well-known printer. In 1751 he visited the Continent, engaged drawing-masters, and purchased pictures, casts, and engravings; and on his return to Glasgow in 1753 he started a school of art. The classes were continued till about 1776, and were far from a pecuniary success; but they afforded training to such excellent artists as David Allan and James Tassie, and exercised a most important and beneficial influence upon Scottish art.

In 1760 the Board of Manufactures in Scotland founded a school of art in Edinburgh which is still in active operation, and which, under the name of "The Trustees' Academy," has afforded instruction to almost every Scottish

painter of distinction for more than a century and a quarter. In 1858 this school was affiliated with the South Kensington Science and Art Department, and it serves not only for the instruction of art-craftsmen in design, but also as a school for painters and sculptors preparatory to the life-class of the Royal Scottish Academy.

In 1880 art instruction was brought within the scope of the Scottish university curriculum by the establishment of the Watson-Gordon chair of Fine Art in the University of Edinburgh, in memory of Sir John Watson-Gordon, through the bequest of a sum of about \$60,000 by his brother and sister.

In Ireland there are classes in connection with the Royal Hibernian Academy for study from the antique and the life; and the Dublin Metropolitan School of Art is under the South Kensington Department.

Various continental schools, especially those of Munich and Antwerp, have attained celebrity; but Paris is now the great centre of art instruction, in which many British and American students will be in America.

have been trained. Since the time of J. L. David—who, when in exile, also influenced the school of Belgium—the French have been celebrated for their command over form; and, in recent years, their power as colorists has greatly increased. The Parisian method of study is admirably adapted for giving its pupils a certain technical dexterity.

At the opening of the twentieth century we realize that the great promise of the future lies in America. Our artists to-day have been educated in all of the best known schools. They have taken honors in the capitals of all the countries of the world and have returned to their native land bearing the fruits of their labor, possessed of great natural ability and unexampled training; that their productions should be essentially American is now being borne in upon them. And under the clear skies and with the wholesome surroundings and untrammeled means for future development, we are convinced that the great school of art in the twentieth century

PART VII. FAMOUS MEN AND WOMEN

OF THE

NINETEENTH CENTURY.

CHAPTER XL.

Celebrated Authors.

REAT intellectual development has characterized the century. This is seen not only in the amazing achievements of mechanical invention and scientific discovery, but also in authorship, in great reforms, and in the brilliant triumphs of oratory and statesmanship. In every department of human activity there have been distinguished workers whose names are written high on the scroll of fame.

Our aim is to present a concise biography of the distinguished men and women of the century, describing, in condensed form, their renowned achievements and narrating the important events connected with their bright careers. For convenience in reference the names are arranged alphabetically.

ALLEN, ELIZABETH ACKERS.

This American poet was born at Strong, Maine, October 9, 1832. She became a contributor to various magazines and under the pseudonym of "Florence Percy" became widely known as an author. A volume of poems published in 1867 was favorably received. In 1860 she became the wife of Paul Ackers, the sculptor, but survived her husband, and some time after his death was married to Mr. E. M. Allen of New York.

Her painstaking work has been widely appreciated, and while her productions are not so abundant as those of many others, she has gained an enviable distinction as a graceful writer, with fine poetic taste. Her beautiful poem en-

titled, "Rock me to Sleep, Mother," has become a household treasure. It exalts and ennobles motherhood, and its tender pathos is universally admitted.

ALLSTON, WASHINGTON.

This eminent American artist and man of letters was born at Waccamaw in South Carolina, November 5, 1779. Being of delicate health he was sent to Newport, R. I., where he remained in school ten years. Having graduated at Harvard College in 1796, he soon afterward went abroad for the purpose of studying, and perfecting himself as a painter. Soon his productions attracted wide attention. At length he returned to his native land and was engaged on a large painting of "Belshazzar; Feast" when he died July 9, 1843.

In addition to his genius as a painter, Allston possessed poetic talent of a high order. He was the author of "The Sylphs of the Season and Other Poems," published in 1813. Washington Irving says of him: "There was something to me inexpressibly engaging in the appearance and manners of Allston. He was of a light, graceful form, with large blue eyes, and black silken hair waving and curling around the pale expressive countenance. Everything about him bespoke the man of intellect and refinement."

ANDERSEN, HANS CHRISTIAN.

A well-known magazine, the "Quarterly Review," says concerning this author, "For vividness and reality of detail, for breadth and boldness in the description of scenery, and for skill in conveying the impression made on a fine mind and earnest heart by all that is beautiful in nature and true in art, he stands without a rival among recent writers of romance."

This is high commendation, yet it accords with the judgment of multitudes who have been charmed by his writings. Not only have his works been widely circulated in his own country, but they have been translated into many foreign languages. The young, especially, have found instruction and entertainment in his delightful stories and fairy tales, published in several volumes, and which are characterized by vivid imagination, quaint humor and not infrequently profound pathos.

Andersen was born at Odense, in the island of Funen, April 2, 1805. His father's family was one of some note and at one time had been rich, but when Hans was born had fallen into poverty.

He was fortunate enough in early life to meet several influential friends who enabled him to obtain an education at the expense of the State. At an early age he wrote several poems, among which "The Dying Child" was particularly admired. From this time he entered upon an upward career and surprised and delighted the public by his tales and romances. Some of his volumes of travels have had a wide circulation. He died in August, 1875. On his seventieth birthday he was presented with a book containing one of his tales in fifteen languages.

ARNOLD, MATTHEW.

This English poet, a son of Dr. Thomas Arnold, of Rugby, was born near Staines in Middlesex, December 24, 1822, and was educated at Rugby and Oxford. He gained prominence as an educator and inspector of schools. His first volume of poems appeared in 1848, and in 1857 he was elected professor of poetry at Oxford. "For combined culture and fine natural feeling in the matter of versification," says the Edinburgh Review, "Mr. Arnold has no living superior." His writings embrace prose as well as poetry, and his views upon religious subjects have attracted wide attention. He received the degree of LL. D. from the universities of Edinburgh and Oxford. Died April 15, 1888.

ARNOLD, EDWIN.

Mr. Arnold has visited America several times and is well known among the literary circles of this country. He was born June 10, 1832, was educated at King's College, London, and University College, Oxford, where he gra-

duated in 1854. For a time he held a government position in India as an educator. The work by which he is best known is entitled, "The Light of Asia," published in 1879. This poem was widely read in America and was considered to possess many claims for admiration. Mr. Arnold is a prolific author, and his works have secured a wide circle of readers. His scholarly and finished style entitles him to high rank among the authors of the day.

BANCROFT, GEORGE.

He is principally distinguished as the author of the history of our country, but not without note as a diplomatist and statesman; he was born in Worcester, Massachusetts, October 3d, 1800. At the age of thirteen he entered Harvard College, graduated with high honors in 1817, and spent two years in study at Gottingen, Germany, where in 1820 he received the degree of Doctor of Philosophy. Returning to America in 1822, he served a year as a Greek tutor in Harvard College when he and Dr. Cogswell, a fellow-tutor, established the Round Hill School at Northampton, Massachusetts, with which Bancroft was associated until 1830. In 1823 he published a volume of poems, and subsequently made translations from the German of the minor poems of Goethe, Schiller, etc., and of some of the historico-political works of Heeren.

In 1834 appeared the first volume of his "History of the United States from the Discovery of the Continent;" followed by the second and third volumes in 1837 and 1840 respectively—the whole embracing "The History of the Colonization of the United States." These were succeeded in the interval

from 1852 to 1860 by five volumes narrating the history of the colonial period to the Declaration of Independence, and in 1866 and 1874 respectively by the two concluding volumes, bringing the history to the treaty of peace with the mother-country in 1782. Bancroft subsequently published "The History of the Formation of the Constitution of the United States" (2 vols., 1882,) which afterwards formed a constituent part of the revised edition of the complete "History of the United States" embraced in six volumes (1882–84).

Bancroft served as collector of the port of Boston (1838-41), under President Van Buren, and was an unsuccessful candidate for the governorship of Massachusetts in 1844. He accepted a seat in the cabinet of President Polk as secretary of the Navy in 1845, and the following year was appointed minister to the court of St. James, a position which he filled until 1849, with honor to his country. A period of retirement from public life followed his return to America. In the civil war he was heartily in accord with the national government, and in 1867 he was appointed by President Johnson, minister to Berlin, serving with distinguished ability until recalled at his own request in 1874. The American press contained highly appreciative notices of Mr. Bancroft's character and work on the occasion of his death, January 17, 1891.

BEERS, ETHEL LYNN ELLIOT.

This American poetess, who is well known for several popular lyrics, was born at Goshen, N. J., in 1827. Her maiden name was Ethelinda Elliott. Her patriotic poem entitled. "The Picket-guard," or "All quiet along the

Potomac,' they say," first published in "Harper's Weekly" in 1861, became instantly popular, and its authorship was contested. Although her poetry is remarkable for simplicity of style and easy versification, it is yet full of life and spirit. A volume of her poems appeared in 1878, and in the following year she died. Few authors have become so widely known by reasons of productions so few in number.

BOKER, GEORGE H.

Mr. Boker is known especially for his "War Lyrics," published in 1864, in some of which the scenes of the civil war are depicted with graphic force. His first volume was entitled, "The Lesson of Life and Other Poems," and appeared in 1847. Several other volumes followed in rapid succession, all of which were well received by the reading public. That he is entitled to a conspicuous place among American poets, is generally conceded.

Born in Philadelphia, October 6, 1823, he graduated at Princeton in 1842, and studied law, but never practiced. He was a man of some prominence in public affairs and in 1871 was appointed minister to Constantinople, and in 1874 minister to St. Petersburg. He was the editor of "Lippincott's Magazine" several years. His death occurred in Philadelphia, January 2, 1890.

BONAR, HORATIUS.

The author of many beautiful hymns, the fame of which is world-wide, was a native of Scotland, and was born in Edinburgh in 1808. In 1856 he published "Hymns of Faith and Hope," and a second series of the same in 1861. He was for many years a minister of the

Free Church, and published several religious works which have had an enormous circulation. He participated actively in all evangelistic work, and, in addition to his pastoral labors, was heard frequently in religious conventions. Died in 1879.

BRONTE, EMILY.

Was born in Yorkshire, England, about 1819. She was one of the authors of a volume entitled, "Poems by Currer, Ellis and Acton Bell," published in 1846. She was also the author of a novel entitled, "Wuthering Heights," issued in 1847, the merit of which has been variously estimated. Died in December, 1848. It is universally conceded that she had talent of a high order, as is evidenced by the fact that fifty years after her death her works were still in demand and had a wide circle of readers.

BROWNING, ELIZABETH BARRETT.

Mrs. Browning must be considered one of the most gifted poets of our time, her works appealing especially to people of intellectual refinement and cultivated taste. In person she was slight, with dark hair and complexion; an easy modest manner and cordiality drew to her many friends. She was born at Durham, March 6, 1809. Her father, Mr. Barrett, was a wealthy merchant of London, who gave his daughter in early life the best opportunities for education. At ten years of age she exhibited fine poetical talent, which was diligently cultivated.

In 1846 she was married to the poet, Robert Browning, with whom she resided in Italy for many years. She produced in 1851 "Casa Guidi Windows," a poem which treats of the political condition of Italy. "This," says the "North British Review," "is the happiest of Mrs. Brownings performances, because it makes no pretensions to high artistic character, and is really a simple story of personal impressions." Her largest, and withal her greatest work, is "Aurora Leigh," a poem, or novel in verse, which is greatly admired. This was published in 1856, and in the same year a new edition of her poems was issued in three volumes. She died at Florence, Italy, in June, 1861.

BROWNING, ROBERT.

This most subtle and intellectual of contemporary English poets, was born at Camberwell, May 7, 1812. His father, a man of parts, was engaged in the city of London. The future poet, after receiving local education, attended lectures at University College, and then travelled abroad. From his earliest years he had been accustomed to write verse, and while still a youth, acquired the triple reputation of poet, musician and modeller.

"Pauline," a dramatic poem, written at the age of nineteen, was published in 1833. Two years later appeared his "Paracelsus," which revealed a greater force. Its energy, its boldness of thought, its lofty aspirations, and its grip of human passion, stamped the author as one of the most promising of the younger poets.

In his later poems the poet pressed into his service in a masterly degree, humor, pathos, passion and tenderness; while the whole were distinguished for their ringing and melodious versification. Browning married in 1846 Elizabeth Barrett, herself a poetess of high and noble gifts, and with her he went to Florence, where they lived in perfect and happy union. In 1850 Browning published "Christmas Eve and Easter Day," poems which defended catholicity in religion, the good to be discovered in the varying forms of Christianity.

The "Browning Society" was established in 1881 for the purpose of promoting the study and influence of the poet's works, and the example of London has been followed by many other large centres in Great Britain, the colonies and the United States. As a poet, Browning is distinguished for his capacity in creating real men and women, and also for the depths of his spiritual insight. His lyrical faculty, dramatic energy, and power of psychological analysis have rarely been equalled. Besides being one of the most erudite of poets, he has intense human sympathy and high imaginative gifts, and a profound vigorous faith. His style is too frequently obscure and difficult, his versification hard and rugged, and his rhymes forced. Mr. Browning died in December, 1889.

BRYANT, WILLIAM CULLEN.

Mr. Bryant easily ranks among the first American poets, and in some respects excels all others. A profound love of nature, fine poetic fancy, love of home and country and easy versification characterize his works, which have struck the popular heart and have been widely read. It is perhaps not a little singular that his most famous poem, "Thanatopsis," was written while yet he was a young man at Williams College.

Mr. Bryant was born in Hampshire

county, Mass., on the 3rd of November, 1794. In college he distinguished himself in the languages, became a student of law in 1812, and afterward practiced law for several years. He removed to New York City in 1825, and soon after became one of the editors of the "Evening Post," which he continued to edit with great ability until his death.

A collection of his poems was published in 1832. Soon after he visited Europe and travelled in Egypt and Syria, writing letters home, which were afterward collected into a volume entitled, "Letters of a Traveller." Mr. Bryant was always a warm advocate of political reforms, opposed the extension of slavery, and ardently supported the Union during the civil war. "No poet," says Griswold, "lias described with more fidelity the beauties of the creation, or sung in nobler song the greatness of the Creator. He is the translator of the silent language of the universe to the world." His translations from foreign languages are graceful and accurate reproductions of the originals, rivalling those of Longfellow. Died June 12, 1878.

BYRON, LORD.

Byron's genius flashed out like a brilliant meteor, compelling attention, and for the most part admiration. He was born in London, January 22, 1788. In early life he exhibited strong passions, an almost ungovernable will, and, at times, a rashness which occasionally appeared even in his later years. Among his mates he was courageous, quick to take an insult, and was never satisfied until it had been resented. In 1805 he went to Trinity College, Cambridge, which he left two years after without a degree.

During his stay at the University, he published a volume of poems entitled, "Hours of Idleness," which was very severely criticised in the "Edinburgh Review." The poet wrote by way of retaliation, his "English Bards and Scotch Reviewers," a caustic and scathing satire, which at the time caused a great sensation and convinced the critics that Byron's genius was not to be terror-stricken or reduced to silence by "paper bullets of the brain."

In 1809 lie travelled throughout Europe, and while in Greece, surrounded by the classic associations of that country, he warmly espoused the cause of Greek independence, a theme which inspired some of his loftiest strains. On his return to England, he published the first two cantos of "Childe Harold's Pilgrimage," the success of which was so sudden and extraordinary that, as he tells us, "he awoke one morning and found himself famous." Soon after he took his seat in the House of Lords, to which by birth he was entitled. Byron wrote easily and rapidly. His various works followed one another in rapid succession. Some of his most pathetic verses were inspired by the infelicities of his domestic relations.

That he had great faults has been universally admitted; nor can it be denied that his genius was of the highest order. Macaulay's critical pen places him in the front rank of modern poets and declares he has never been excelled in the expression of scorn, misanthropy and despair, and that there is not a single note of human anguish of which he was not master. He died on the 19th of April, 1824, at the early age of 36, yet had already achieved undying fame.

CAMPBELL, THOMAS,

Author of "The Pleasures of Hope," and many other poems marked by true poetic genius, was a native of Scotland, and was born at Glasgow in 1777. After a brilliant literary career, he died at Boulogne in 1844, and was buried in Westminster Abbey, Lord Macaulay, Dean Milman, and other celebrities acting as pall-bearers. Few poems of any author have become more generally known, or have been received with greater favor. His poems entitled "Hohenlinden," "Lochiel" and "Gertrude of Wyoming," have been universally popular and were known to all the school-children of our own country a generation ago.

CARLETON, WILL M.

This popular American poet was born at Hudson, Michigan, October 21st, 1845. He graduated at Hillsdale College in 1869. His principal works are "Farm Ballads" (1873), "Farm Legends" (1875), "Young Folks' Centennial Rhymes" (1876), and "Farm Festivals" (1883).

Mr. Carleton's tastes and style qualify him to portray in a very effective manner domestic scenes and the experiences incident to country life, an example of which is found in his well-known poems entitled "Over the Hills to the Poorhouse," and "Betsy and I Are Out."

CARLYLE. THOMAS.

This distinguished, and withal, eccentric author gained by his writings a wide celebrity for originality, graphic description and vigorous English. Bold in thought, a hater of shams, rugged in matter and manner, his striking essays forced themselves upon the atten- several volumes of buoyant pleasant

tion of the public. Mr. Carlyle must be considered as one of the most brilliant authors of his day. The work that gave him the greatest reputation was his "History of the French Revolution," which depicted with remarkable force the bloody scenes of that social and political convulsion. Born at Ecclefechan, Scotland, in 1795. Died February 5, 1881.

CARY, ALICE.

This well-known American authoress first came into notice by her contribution to the "National Era," for which she wrote under the nom de plume of "Patty Lee." Her "Clovernook," comprising sketches of western life, was popular both in America and England. Several works of fiction, and various poems, have also met with marked favor. Born near Cincinnati, Ohio, 1820, died in New York, where she resided during the latter part of her life, in 1871. She was also gifted in the portrayal of domestic scenes and the charms of country life.

The writings of the Cary sisters have long been familiar to the American people, their moral tone, felicitous expression and elevated sentiment having given them wide popularity. From their gifted pens have come several hymns that have gained a high degree of favor. It is rarely that two members of the same family exhibit so high an order of genius.

CARY, PHŒBE.

She was the younger sister of Alice and equally gifted. Her birthplace was the Miami Valley, where she was born in 1824; her death occurred in She published independently 1871.

verse and contributed a third of the "Poems of Alice and Phœbe Cary," published in 1850. During the later years of their life the Cary sisters resided in New York, were actively engaged in religious work, and were greatly beloved by a large circle of friends.

COOPER, JAMES FENIMORE.

The popular author of the "Leather-Stocking Tales" was born at Burlington, N. J., in September, 1789. father was Judge Cooper, a well-known public man, and his mother's maiden name was Fenimore. About 1790 the family moved to the shore of Otsego Lake in New York where they founded Cooperstown, having taken up a large tract of land which was then on the outskirts of civilization and the residence of Indian tribes. Young Cooper entered Yale College in 1802, remained there about three years and then entered the navy as a midshipman. In 1811 he retired from the navy and was married the same year.

His first literary work was a novel, entitled "Precaution," which was published in 1819 and was a failure. Being a man of great energy and conscious that there was something in him more than he had shown, he continued his literary work and published "The Spy," founded on incidents connected with the Revolutionary war. It was very successful and was re-published in England. It was translated into several languages, and marked the beginning of that long literary career which placed Mr. Cooper's name among the most distinguished American authors. has the high praise," says the "North American Review," "and will have the

future glory of having struck into a new path, of having opened a mine of exhaustless wealth. In a word he has laid the foundation of American romance."

Other tales from the pen of Cooper followed, many of which were a vivid portrayal of Indian life, with which he was made familiar by personal contact with the Red Men. His works are numerous and some of them have been immensely popular, such as "The Pioneers," "The Last of the Mohicans," "The Deerslayers," "Story of the American Navy," etc., etc. He died in Cooperstown in September, 1851.

"He wrote for maukind at large," says W. C. Bryant, "hence it is that he has earned a fame wider than any American author of modern times. The creation of his genius shall survive through centuries to come, and only perish with our language." "His writings," says William H. Prescott, "are instinct with the spirit of nationality. In his productions every American must take an honest pride. For surely no one has succeeded like Cooper in the portraiture of American character, or has given such glowing and eminently truthful pictures of American scenery."

CRAIK, DINAH MARIA MULOCH.

She was born at Stoke-upon-Trent in 1826. She early took the burden of supporting an ailing mother and two younger brothers, and wrote stories for fashion-books, as well as for graver publications. Her first serious appearance as a novelist was in 1849, with her story "The Ogilvies," which was followed by "Olive, the Head of the Family," "Agatha's Husband." But she never surpassed or even equalled her domestic novel "John Halifax"

(1857), which has had, and still continues to have, an extraordinary popularity, and has been translated into French, German, Italian, Greek, and Russian. The scene is laid at Tewkesbury, where a marble medallion has been placed to her memory in the abbey.

CROSS, MARIAN EVANS LEWIS (GEORGE ELIOT).

An English writer of remarkable power, the daughter of Robert Evans, a surveyor. She was born November 22, 1819, and subsequently became one of the most distinguished writers of the century. In 1858 appeared her "Adam Bede," followed by "The Mill on the Floss" (1859), "Silas Marner" (1861), etc., etc., "Middlemarch" appeared in 1872, "Daniel Deronda" in 1876. She was married in the spring of 1880 to a Mr. Cross, and died December 22 of the same year.

DICKENS, CHARLES.

The name of Gladstone, or Napoleon, or Lincoln, or McKinley, is not better known than that of Pickwick, or Macawber, or Pecksniff, or Uriah Heap, or Mark Tapley, or Barkis, or Sairy Gamp, or Little Nell, or many others that might be mentioned, all of which, although fictitious, seem quite as real as any historic character from Julius Cæsar to General Grant. What amazing genius could create these characters and endow them with an endless life? There has never been but one man who could make fictitious characters so life-like and so universally known, causing them to become, as it were, household names.

The great novelist, whose works of fiction are known and read throughout the civilized world, and who gained a renown unequaled by that of any author

of recent times, was born at Portsmouth, England, February 7, 1812. His father wished him to enter the profession of law, but soon becoming disgusted with it, because he was conscious that it was not his proper sphere, he gave up the study of it, removed to London, and became a reporter for the "Morning Chronicle." For this paper he began to write sketches that at once attracted attention and showed their author to be possessed of an uncommon faculty for depicting common life both in its tragic and humorous phases.

Dickens was only 24 years old when he published "Pickwick Papers." He immediately sprang into popularity, and became the favorite writer of both England and America. His subsequent works, such as "Oliver Twist," "Nicholas Nickelby," "David Copperfield," "A Tale of Two Cities," "The Old Curiosity Shop," and many others all served to increase his reputation, although it was predicted that he would soon "write himself out." He maintained his reputation by his wonderful creations in the realm of fiction and the charm of his transcendent genius.

Many of his works show intense sympathy with the lower classes and the struggling poor, the hard worked sons and daughters of toil, and those who are the victims of greed and oppression. It is not too much to say that some of the most important reforms in England which benefitted the laboring classes could be traced directly to the influence of his magic pen. Mr. Dickens came to this country on two occasions. On the first he angered many of his admirers by his caustic comments on American society and customs. On the second occasion he appeared as a public

reader of his own works and was welcomed by thousands in all our larger cities. Work was his element, in fact, over-work, from which he undoubtedly died, June 9, 1870, and was buried in "Poet's Corner," Westminster Abbey.

EMERSON, RALPH WALDO:

Few names in American literature represent so much of that kind of thought which sets others thinking and influences them as does the name of Ralph Waldo Emerson. He was born in Boston, Massachusetts, in 1803, and died in Concord, Mass., April, 1882. His father was a respected minister, and his mother was a woman of more than ordinary mind and education. Emerson graduated at Harvard in 1821, yet did not take high rank in his class. He was successful, however, in obtaining a prize for an English essay. After gradnating he became a teacher, and at the same time studied theology under the direction of Dr. Channing.

As a young man he is described as grave, gentle and never punishing his pupils except by words. Having become a contributor to several magazines and having written a work on "English Traits," he became somewhat known as an author, yet the product of his mind came slowly as did the appreciation of the reading public. A vein of philosophy runs through his writings, which appeal especially to those of scholarly tendencies.

His published works comprise "Nature; Addresses and Lectures;" "Essays," first and second series; "Representative Men;" "The Conduct of Life;" "Society and Solitude;" "Letters and Social Aims;" "Poems;" "Lectures and Biographical Sketches;"

"Miscellanies." Emerson wrote occasionally in verse from his schooldays, yet the charm of his poetry is more that of profound thought than of imagination or vivid description. Obtaining the title of "The Concord Philosopher," he frequently appeared in public as a lecturer, but in his later years withdrew from the public gaze and passed his last days in that philosophic repose which might be expected from one of his temperament and peculiar menta!

FIELD, EUGENE.

A popular American poet, whose productions, of a pathetic as well as humorous character, have made him widely known. He was educated in Massachusetts, thence going to Wisconsin and entering journalism, and finally becoming connected with a leading daily of Chicago. Many of his pieces were written for children, and are highly appreciated by the little folks. Died in 1896.

GREELEY, HORACE.

Our greatest American journalist was born at Amherst, N. H., in February, 1811, and was the son of a poor farmer, who removed to Vermont in 1821. Having learned the art of printing, young Greeley finally made his way to the city of New York. After being connected with several journals, he founded the "Daily Tribune" in 1841, and continued as its editor up to the time of his death, in 1872. Mr. Greeley was a man of very pronounced opinions, and great ability in advocating and defending them. No journalist was ever better known to the people at large, and none in this country ever exerted so vast an influence. In 1872 he was the Liberal candidate for President of the United States, but failed of election, the vote of the country being largely given to Grant. The result was a great disappointment to Mr. Greeley whose friends led him to believe he was sure of election. He died November 29, 1872.

HALLECK, FITZ-GREENE.

This American poet was born at Guilford, Connecticut, July 8, 1790. By his mother he was descended from John Eliot, "the apostle of the Indians." He became a clerk in a bank in New York in 1811, and in 1832 the private secretary of John Jacob Astor; 1849 he retired, on an annuity of \$200 left him by Astor, to his native town, where he spent the remainder of his days, and died November 19, 1867.

From his boyhood Halleck wrote verses, and in 1819 he contributed, with Joseph Rodman Drake, a series of humorous satirical papers in verse to the New York "Evening Post." In the same year he published his longest poem, "Fanny," a satire on the literature, fashions, and politics of the time, in the measure of "Don Juan." He visited Europe in 1822, and in 1827 published anonymously an edition of his poems. In 1865 he published "Young America," a poem of three hundred lines.

His complete "Poetical Writings" have been edited by his biographer (1869). Halleck is a fair poet. His style is spirited, flowing, graceful and harmonious. His poems display much geniality and tender feeling. Their humor is quaint and pungent, and if not rich is always refined. The poem by which he is better known than by any other is entitled, "Marco Bozarris," beginning with the well known

line, "At midnight in his guarded tent."

HARTE, FRANCIS BRET.

Mr. Harte has achieved distinction by his poems in dialect and by his prose works which make a point of delineating western life and manners. He was first brought to notice by his jingle entitled "The Heathen Chinee." He was born at Albany, New York, August 25, 1839, went to California in 1854, learned the art of printing, and in 1857 became connected with a newspaper, first as printer and finally as editor. For six years, beginning with 1864, he was secretary of the United States Mint at San Francisco. He then connected himself with a magazine called the "Overland Monthly," and afterward held a professorship of recent literature in the University of California. Since that time he has been United States Consul at several foreign ports, at the same time carrying on his literary pursuits.

Many of his books are collections of short tales skilfully written and possessing undoubted merit. Among his well-known works are "The Luck of Roaring Camp," "East and West Poems," "Tales of the Argonauts," etc.

HAWTHORNE, NATHANIEL.

The well-known author of the celebrated "Scarlet Letter" and "House of Seven Gables," together with other works which have placed him in the first rank of modern authors, was born at Salem, Massachusetts, on the 4th of July, 1804. He graduated at Bowdoin College, Maine, in 1825, Longfellow the poet being one of his classmates. His nature was extremely sensitive, his disposition retiring, his acquaintances few

and his manner gentle and winning. In person he was tall, broad-shouldered and possessed what might be called a majestic presence. Both in mind and body he was constructed to be a commanding figure and made a powerful impression upon all who met him.

Hawthorne made the acquaintance of Franklin Pierce, afterward President of the United States, who did much to cheer him in his fits of despondency, and when he became President appointed him as our consul at Liverpool, which was the most lucrative office at his disposal. Previous to this, Hawthorne, under Mr. Polk's administration, was appointed surveyor of the port of Salem, Massachusetts, which he held for three years. In 1850 he published his celebrated "Scarlet Letter," a romance of extraordinary power, and by some considered his masterpiece, although for this distinction it has to compete with his "House of Seven Gables" and his "Marble Faun."

It is generally conceded that in elegance of style, felicity of expression, use of pure English simplicity, clearness and force, he is unrivalled among American authors. The criticism has been made that there is a morbid element in Mr. Hawthorne's writings, a fiery glow of suppressed excitement which renders them unwholesome reading. This judgment, however, is not likely to be accepted by the average reader as strictly correct. Died suddenly at Plymouth, Mass., 1864.

HEMANS, FELICIA DOROTHEA.

This poetess was born at Liverpool, September 25, 1793. Her father, George Browne, was a Liverpool merchant, of Irish extraction; her mother, whose

maiden name was Wagner, was of mixed Italian and German descent. Felicia was distinguished for her beauty and precocity, and at an early age she manifested a taste for poetry, in which she was encouraged by her mother. Family reverses led to the removal of the Brownes to Wales, where the young poetess imbibed a strong passion for nature, read books of chronicle and romance, and gained a working knowledge of the German, Italian, Spanish, and Portuguese languages.

She also cultivated her excellent musical taste. Her first volume was published in 1808, when she was only fifteen years of age, and contained a few pieces written about four years earlier. Her second entitled "The Domestic Affections," appeared in 1812.

In the same year she married Captain Hemans of the Fourth Regiment, whose health had suffered in the retreat on Corunna, and afterward in the Walcheren expedition, and who settled in Italy in 1818. After this time they never met again: their marriage was understood not to have been happy. Mrs. Hemans, though in poor health, now devoted herself to the education of her children, to reading and writing, and spent the rest of her life in North Wales, Lancashire, and later at Dublin, where she died, May 16, 1835.

Mrs. Hemans, without great originality or force, is yet sweet, natural and pleasing. But she was too fluent and wrote much and hastily; her lyrics are her best productions; her more ambitious poems, especially her tragedies, being, in fact, quite insipid. Still, she was a woman of true genius, though her range was circumscribed, and some of her little lyrics, "The Voice of Spring,"

"The Better Land," "The Graves of a Household," "The Treasures of the Deep," and "The Homes of England," are perfect in pathos and sentiment, and will live as long as the English language. These are found in almost every school collection, and this early familiarity with her sweet and simple lyrics has helped to keep her memory green.

HOLLAND, JOSIAH GILBERT.

Dr. Holland is a fine example of an author whose works are pure in sentiment, contain practical every-day helps for the conduct of life, and are admirably suited to the average reader. He was born in Belchertown, Massachusetts, July 24, 1819, and graduated at the Berkshire medical college at Pittsfield, in 1844. He soon abandoned his profession, however, and after fifteen months as a school superintendent at Richmond, Va., became assistant editor of the Springfield "Republican," of which he was part proprietor also from 1851 to 1866.

In 1870, with Roswell Smith and the Scribners, he founded "Scribner's Monthly," which he conducted successfully till his death, October 12, 1881. In this magazine appeared his novels, "Arthur Bonnicastle" (1873), "The Story of Seven Oaks" (1875), and "Nicholas Minturn" (1876). "Timothy Titcomb's Letters" (1858) went through nine editions in a few months; and this sale was succeeded by his "Life of Lincoln" and his most popular poems "Bitter Sweet" (1858), "Kathrina" (1867), and "The Mistress of the Manse" (1874). Most of Holland's works have been republished in Britain.

The works of Dr. Holland have been

widely read by the American people. His letters to young people have passed through many editions, and are well worthy of a place in every household. They abound in a certain practical sense and homely wisdom which stand in striking contrast to the cheap literature of the day, the influence of which cannot be considered the most healthful.

HOLMES, OLIVER WENDELL.

For many years Dr. Holmes was the most conspicuous figure in the literary circles of Boston. His ripe culture, his poetic genius, his inexhaustable fund of humor and his genial disposition displayed in all his productions, made him one of the best known writers of his He was born in Cambridge, Massachusetts, August 29, 1809, and at the age of twenty graduated at Harvard College. His father was a Congregational minister and a writer of some note in his day. After leaving college Dr. Holmes studied law, but soon changed his profession to that of medicine. Having pursued his medical studies in Europe he returned to this country, and in 1838 was elected professor of anatomy and physiology in Dartmouth College, subsequently filling the same chair at Harvard.

While a young man, and before leaving college, he had distinguished him self as a poet and a writer of great originality. One of his first literary successes consisted of contributions to the "Atlantic Monthly" under the title of "The Autocrat of the Breakfast-Table," which were followed later by another series of papers called "The Professor of the Breakfast-Table," and "The Poet at the Breakfast-Table." These papers were widely read and enjoyed by

reason of their subtle thought, quaint humor and deep insight into human nature. He wrote two works of fiction, "Elsie Venner," and "The Guardian Angel." Numerous other productions followed, including poems on various occasions, all of which stamped him as a man of decided genius. He published a biography of his friend Emerson which showed a just appreciation of the "Concord Philosopher."

Dr. Holmes was especially happy in his verses written for public occasions. His death occurred October 7th, 1894, at the ripe age of 85 years. Few American authors have left so distinct an impression upon our literature. His attractive qualities as a neighbor, friend and companion, are worthy of especial mention.

HOOD, THOMAS.

The genius, the poet, whose unrivalled productions by their pathos and humor awaken alternate tears and laughter, most of whose life was a sad struggle with adversity, was born in London in 1798. His name is associated with the periodical literature of his time, both as manager and author. His best known pathetic pieces are "The Song of the Shirt," and "The Bridge of Sighs;" while "Faithless Nellie Gray," and "Faithless Sallie Brown" are happy specimens of his rollicking humor. Hood died in 1845.

HUGO, VICTOR.

This French celebrity, whose writings are among the most remarkable of any age or country, was born at Besancon in 1802. In early life he exhibited a passion for politics and first employed his pen upon political themes. In 1818 there, and again lie received prizes for several royalist empire, when he retained to the most remarkable of any again to the most remarkable of a most remarkable of a most remarkable of a most rem

odes. Through his long and brilliant career he displayed great activity, became a voluminous author of prose and verse, received the highest distinctions that could be conferred upon him by his countrymen, and was recognized as a distinct power in the politics and literature of France. His rich imagination, wonderful descriptive power and deep sympathy with the suffering poor and unfortunate, serve to render him not only the best known author of France, but by a large majority of his countrymen, the best beloved and the most admired.

Among his most successful and powerful works are "Notre Dame de Paris," a romance (1831), "Le Roi s'amuse," a drama (1832), "Les Miserables," a novel (1862), "The Toilers of the Sea," (1865), and poems entitled "The Leaves of Autumn," which, says a French critic, "contain beauties of the first order." He was admitted into the French Academy in 1841, and raised to the rank of peer in 1845. He gave his cordial adhesion to the republic of 1848, and was elected to the Constituent Assembly by the voters of Paris. He opposed Cavaignac, and in 1849 joined the party of advanced Democrats of whom he became a leader and distinguished orator. For his opposition to the "coup d'etat" of December 2d, 1851, he was banished.

He retired to the island of Guernsey, where he resided until the fall of the empire, when he returned to Paris. In 1871 he was elected to the National Assembly, but soon resigned his seat and went to Brussels. He was expelled for his sympathy with the Communists there, and again returned to Paris. Died May 22, 1885.

IRVING, WASHINGTON.

The first American who obtained a European reputation merely as a man of letters, was born at New York, April 3, 1783. Both his parents were immigrants from Great Britain. Irving was intended for the legal profession, but his studies were interrupted by an illness necessitating a voyage to Europe, in the course of which he proceeded as far as Rome, and made the acquaintance of Washington Allston. He was called to the bar upon his return, but made little effort to practice, preferring to amuse himself with literary ventures.

The first of these of any importance, a satirical miscellany entitled "Salmagundi," which was written in conjunction with his brother William and J. K. Paulding, gave ample proof of his talents as a humorist. These were still more conspicuously displayed in his next attempt, "Knickerbocker's History of New York," (1809).

The satire of "Salmagundi" had been principally local, and the original design of "Knickerbocker's History" was only to burlesque a pretentious disquisition on the history of the city in a guide book by Dr. Samuel Mit-The idea expanded as Irving proceeded, and he ended by not merely satirizing the pedantry of local antiquaries, but by creating a distinct literary type out of the solid Dutch burgher whose phlegm had long been an object of ridicule to the mercurial Americans. Though far from the most finished of Irving's productions, "Knickerbocker" manifests the most original power, and is the most genuinely national in its quaintness and drollery.

In 1820 Irving brought out "Geoffrey Crayon's Sketch Book," which contains

an interesting description of an English Christmas, displaying the most delicate humor. Some stories and sketches on American themes gave it variety; of these "Rip Van Winkle" was the most remarkable. It speedily obtained the greatest success on both sides of the Atlantic. Other works followed, among which were "Tales of a Traveller," "The Conquest of Grenada" and "The Alhambra."

In execution Irving's works are almost faultless; the narrative is easy, the style pellucid, and the writer's judgment nearly always in accordance with the general verdict of history. They will not, therefore, be easily superceded, and indeed Irving's productions are in general impressed with that signet of classical finish which guarantees the permanency of literary work more surely than direct utility or even intellectual power. Died in 1839.

KEATS, JOHN.

Youngest to rise and earliest to set in that brilliant constellation of poets who ennobled England during the first half of the nineteenth century, John Keats, both in himself and in his work, is one of the most profoundly interesting and attractive figures in literature. In character, true, magnanimous, modest and tender; much tried and rarely failing, throughout training himself sedulously for the highest achievements in poetry—his life as a man and as an artist was one of persistent growth onward and upward.

Keats was born in Finsbury, London, son of a respectable livery stable keeper; sent early to school at Enfield where an elder boy, Cowden Clarke, turned his boyish energies at thirteen toward literature. Henceforth Keats read much and widely. Quitting school in 1810, Keats was first apprenticed to a surgeon, then, till 1817, practised diligently in London, and (for his age), with success. But poetry had now become paramount, and his high sense of duty withdrew him from a profession demanding imperiously a man's entire devotion.

Leigh Hunt welcomed Keats as a contributor to the "Examiner," and he soon gained celebrity. Unfortunately he developed a tendency to consumption which interfered with his literary labors. In 1817 he published "Endymion." In addition to this we may mention as among the most important of his works, "Hyperion," "Lamia," and "Isabella." Speaking of his works Lord Jeffrey said, "We have been exceedingly struck with the genius displayed and the spirit of poetry which breathes through all their extravagance." Keats was born October, 1795, and died in February, 1821, at the early age of 24.

KIPLING, RUDYARD.

Among the most recent authors of fiction and poetry the name of Kipling has become prominent. He was born in Calcutta in 1865, was sent to school in England, and having returned to India, became a journalist. He early showed a taste for poetry, and also became a writer of stories, the scenes of which were laid in Judia. Among the titles of his volumes are, "Plain Tales from the Hills," "Soldiers Three," "The Gadsbys," "In Black and White," "Under the Deodars," "The Phantom Rickshaw," and "Wee Willie Winkie." His "Jubilee Hymn," written on the occasion of the sixtieth anniversary of Queen Victoria's coronation, is consid- Student" appeared in 1843. This was

ered the best of all his attempts in the line of poetry. Mr. Kipling came to this country and resided two years, where he became well known in literary circles and where he has found many appreciative readers of his works. His stories are mostly colored with the spirit of adventure, such as might be expected from a lover of the chase.

LONGFELLOW, HENRY WADSWORTH.

Our gifted poet whose works lend an unrivalled charm to American literature, gained a world-wide distinction, and is equally honored at home and abroad. Wherever the English language is the common tongue Longfellow is read and admired. Surpassed only by Moore in ease and elegance of rliythm, some of his productions have so touched the popular heart that they have become familiar in almost every household. His style is pure and simple, his thought is clear and transparent, while there is an elevation of sentiment which captivates the most cultivated readers. The career of Longfellow began in early life, and was well sustained for a long period of time. He was born in Maine in 1807, was educated in Bowdoin College, was made Professor of Languages in that institution when he was but nineteen years old, and, leaving Bowdoin, accepted a professorship at Harvard.

In 1839 appeared his romance o "Hyperion," and a collection of his poems, entitled "Voices of the Night," which attracted great attention and raised him at once to the first rank among American poets. In 1841 he published "Ballads and Other Poems;" his charming drama of "The Spanish

followed by his "Poets and Poetry of "The Belfry of Europe," (1845). Bruges, and Other Poems" (1846), and "Evangeline," (1847) one of the most admired of all his productions. has been pronounced (and we think justly) "the most perfect specimen extant of the rhythm and melody of the English hexameter." It was followed by "The Golden Legend" (1851), "The Song of Hiawatha" (1855), perhaps the most popular of all his works, "The Courtship of Miles Standish" (1858), "Flower de Luce" (1866), "New England Tragedies" (1868), "The Divine Tragedy" (1872) "Three Books of Song" (1873), "Aftermath" (1874), "The Hanging of the Crane" and "The Masque of Pandora" (1875).

Longfellow resigned his chair at Harvard in 1854, and was succeeded by Lowell. In 1868-69 he traveled in Europe, and was everywhere received with marked attention, the degree of D.C. L. being conferred on him by the Universities of both Oxford and Cambridge, England. Mr. Longfellow died at Cambridge, Massachusetts, March 24, 1882.

LOWELL, JAMES RUSSELL.

Mr. Lowell's position as an author of both prose and poetry is too well known to need any comment. He has long been ranked with Longfellow, Holmes, Emerson and others, whose achievements have given fame to American literature. While his versification is not so graceful or cultured as that of Longfellow, it exhibits a remarkable strength and force. A vein of humor runs through some of his prose writings as well as some of his poems, and this has added much to their popularity.

Mr. Lowell came from a distinguished family, his father being a minister of the West Church in Boston. He was born in Cambridge, Massachusetts, February 22, 1819, and in his sixteenth year graduated at Harvard College.

He studied law, but never had any serious intention of making that his life pursuit. Perliaps no American writer has exhibited more versatility or has touched upon a wider range of subjects, adorning each with his graceful pen. In 1844 he published a volume of poems which was followed by a second collection in 1848, and a small volume, separately, entitled, "The Vision of Sir Launfal." In the same year he also published his famous "Biglow Papers," a very witty and caustic satire in the Yankee dialect on the events of the Mexican War.

Having spent a summer in Europe, he returned, and in the winter of 1854–55 delivered in Boston a very popular course of lectures on the British poets. About this time Mr. Longfellow resigned the chair of modern languages at Harvard, and Mr. Lowell was at once appointed his successor. He became the editor of the "Atlantic Monthly" in 1857 and held this position for five years.

Several volumes of poems were issued subsequent to this time and he also published several volumes of his prose writings, entitled, "Among My Books" and "My Study Windows." In 1877 he was appointed United States Minister to Spain, and from 1879 until his removal by President Cleveland, in 1885, he was minister to England. In 1883 he was chosen lord rector of St. Andrew's University, and while in England he received the degree of LL.D

from the Universities of Oxford, Cambridge and Edinburgh. Died August 12, 1891.

LYTTON, ROBERT BULWER.

This English poet was the son of Lord Lytton, the well known novelist. He was born in 1831, and was educated in England and Germany.

Under the pseudonym of "Owen Meredith" he published a number of volumes of verse and prose works, including the "Life and Letters" of his father. The work by which he is best known is "Lucile," a romance in verse, which, since its publication in 1860, has passed through many editions and has had a multitude of readers. He found time during his public duties to engage in literary work for which he had a decided preference. His poems are graceful and abound in fine descriptive passages. His death occurred in 1805.

MACAULAY, LORD.

A great name in modern English literature, and one that is likely to survive for generations to come. In commanding ability, in keen historic insight, in poetical talent, and in the skillful use of the English language, he has few, if any, superiors. His works are classics, and have secured the attention of the most scholarly readers. He distinguished himself in Parliament by his brilliant orations, and also became widely known by his contributions to the "Edinburgh Review," which placed him head and shoulders above all other contributors to that famous journal.

Lord Macaulay was born in Leicestershire, October 25, 1800, and was educated at Trinity College, Cambridge, where he won a medal for English

verse, obtained a prize for Latin declamation, gained a scholarship and in 1824 was elected to a Fellowship. In 1826 he was called to the bar, but made no attempt to secure a practice, his tastes inclining him to politics and literary pursuits. His poems, most of which commemorate historic events, exhibit in a high degree the art of word painting, and are full of virile energy.

His best known work is his "History of England," which shows great research and is written in the most attractive style. He was devoted to his family who were in humble circumstances, and was a most affectionate son and brother. He died in 1859 and was buried in Westminster Abbey.

MOORE, THOMAS.

"The Bard of Erin" was born in Dublin, May 28, 1779, and was the son of a Catholic grocer. He was sent to the same school where Sheridan was educated and where he himself became "a determined rhymer." After studying at Trinity College, he went to London and in 1800 published a translation of "Anacreon," which he dedicated to the Prince of Wales, his patron then, but the butt of his satire afterward. It proved a great hit, and, with his musical talent, opened his way into the best society.

He published "Odes and Epistles" in 1806, and from 1807 to 1834 produced his popular "Irish Melodies," which have given him a place among the first English poets and superior to any other in his native land. His most elaborate work is "Lalla Rookh," for which he received \$15,000. This poem has been one of the most popular written by any modern author. Various other works

in prose and poetry were well received. His best productions, however, are his lyrics, love songs breathing the most ardent passion, many of which are familiar to the general public. As a graceful versifier and writer of poetry which has the ring of perpetual music in it, Moore is unexcelled. He was a great social favorite, enjoying the friendship of Byron and other celebrities. His death occurred in 1832.

PAYNE, JOHN HOWARD.

Author of "Home, Sweet Home," which was written while he was United States Consul at Tunis, where he died in 1852. He was born in New York in 1792, and in early life was an actor in American cities and in London. His remains now repose at Washington, D. C., where a splendid monument, the gift of Mr. Corcoran, the banker, has been erected to the memory of the author of our sweetest American song.

POE, EDGAR ALLEN.

An American poet whose most celebrated poem, "The Raven," holds first rank in our poetical literature. Poe's genius is universally acknowledged. His writings bear in every line the stamp of originality; his conceptions are unique, and his style of versification is peculiarly his own. He was of nervous temperament, unfortunate in some of his habits, the victim of adversity, and his life has been the subject of much criticism, while his works have been universally admired.

He graduated at the University of Virginia in 1826, and in the next few years was editor of several magazines that were popular in their day. Among his prose works, "The Gold Bug" is well known, but his poems have

gained the wider circle of readers and admirers. "The Raven," already mentioned, and "The Bells" have made their author noted. Born in Boston, Mass., in 1811, and died in Baltimore, Md., in 1849, of delirium tremens.

PULITZER, JOSEPH.

This very successful journalist was born in Hungary in the latter part of 1847. Coming to this country during the Civil War, he enlisted in a German Cavalry regiment served until peace was declared and was honorably mustered out of service. He turned his attention to journalism, showed conspicuous ability as a writer, and also obtained an interest successively in several newspapers.

In 1883 he bought the "New York World," and gave it a phenomenal success. From a circulation of a few thousand copies daily, the circulation went up toward half a million. The energy and ability displayed by the proprietor and manager caused much comment, and marked him as one of the greatest journalists of the age. He was elected as a Democrat to the Fortyninth Congress to represent the North District of New York, but resigned his seat on account of private business and professional duties.

READ, THOMAS BUCHANAN,

He distinguished himself as a poet and artist, and his productions have always been regarded as among the best in the art and literature of America. The lyric entitled "Sheridan's Ride," commemorating one of the exploits of the great cavalry General, has had a more general reading than anything of the kind ever published in this country. The author excelled in this style of poetry. His genius is unquestioned. The poementitled "The Closing Scene," is said by the "Westminster Review" to be the finest written in the present generation.

His best known work as an artist is his group of "Longfellow's Children." Mr. Read always had the happy faculty of treating subjects of immediate interest in such a way as to gain wide attention from the reading public. Mr. Read was born at Chester, Pennsylvania, in 1822, and died in 1872.

RILEY, JAMES WHITCOMB.

"The Hoosier Poet of America," was born in Greenfield, Indiana, in 1852. Over an assumed name he began to contribute verses in the Hoosier dialect to the Indianapolis papers in about 1875, which attracted considerable attention. Since then his productions have been widely read. They are characterized by a rich vein of humor, as well as pathos, and their setting in dialect gives them additional charm and interest.

RUSKIN, JOHN;

The distinguished prose author and critic, whose masterly works have made a place for themselves in the literature of our day, was born in London, England, in 1819. His writings on art, including "Modern Painters," "The Seven Lamps of Architecture," and "Stones of Venice," are brilliant in thought and exceedingly forcible in style. Ruskin in his writings compels attention. There is something striking in every paragraph. His thought is of the highest order, his words ring like blows on an anvil, and his marshalled

sentences are like battairons charging in battle.

He published nearly thirty works, mainly on art and architecture, and maintained his supremacy in this field of literature to the last. He also contributed largely to contemporaneous literature. He was elected Professor of Fine Arts at Oxford, 1869, and received the degree of L.L. D. from the University of Cambridge in 1871. Died in 1899.

SAXE, JOHN GODFREY.

He excelled especially as a humorous poet, and many of his pieces have become familiar to the reading public. When he began to write he struck out into a new field and his venture was most successful. Mr. Saxe was born in Franklin County, Vermont, in 1816. He graduated from Middlebury College, Vermont, in 1839, and subsequently became editor of the "Burlington Sentinel." He was elected State's attorney in 1851. A collection of his poems appeared in 1849. They rank among the most successful productions of their kind, and have obtained extensive popularity. A new edition of his collected poems was published in 1864. He produced in 1866 "The Masquerade, and Other Poems," and "Leisure Day Rhymes" in 1875. Died March 31, 1887.

SCOTT, SIR WALTER.

The very name of Sir Walter Scott strikes a responsive chord in almost every breast, for few are the persons who have not been charmed and delighted with the "Waverly Novels" and his sprightly, spirited poems. His name is the chief ornament of Scottish literature, and such is the character of his works that they can perish only

with the language. In accuracy of historic description, in throwing over his writings an air of charming romance, in skillful weaving of the plot, and in photographing the various characters so that the reader almost imagines he sees them before his eyes, Scott may be said to be without a rival. His works have had a phenomenal popularity.

He was born in Edinburgh, 1771. Of delicate health in early life, he slowly advanced to a sturdy manhood, and became distinguished as an author at a period comparatively late. Perhaps no other author wrote so much when past the age of fifty-five. It is honorable to the memory of Scott that a large amount of his literary work was undertaken and carried forward for the purpose of meeting a pecuniary obligation. "Waverly" took the world by storm, and Scott who did not acknowledge the authorship, might well suppose he had found the pot of gold at the end of the rainbow.

As a writer it is a truism to say that, since Shakespeare, whom he resembled in many ways, there has never been a genius so human and so creative, so rich in humor, sympathy, poetry, so fertile in the production of new and real characters, as the genius of Walter "The Lay of the Last Minstrel," and "The Lady of the Lake," hold high rank in the realm of poetry and are full of life and spirit. They are colored by the romance of Scottish history and Scottish scenery. For a long time Scott resided at Abbotsford, a few miles from Edinburgh, which was one of the famous places to visit by all tourists in Scotland. He died in 1832.

SHELLEY, PERCY BYSSHE.

Shelley was a brilliant light in the

literary firmament, and although destined soon to set, the beams of his glowing genius still linger and excite admiration akin to wonder. Leigh Hunt says concerning his "Ode to a Skylark," "a little song yet it fills all heaven." Few men ever possessed the poetic gift in a higher degree.

Shelley was born in Sussex county, England, in August, 1792, and lost his life by drowning at Leghorn, Italy, in July, 1822; yet this youth whose career was cut off at the early age of thirty left an imperishable name in the world of letters. His poetry was inspired by an ardent passion for truth and an ardent love of humanity.

Shelley's most celebrated productions are "Queen Mab," "The Revolt of Islam," "Rosalind and Helen," "Prometheus Unbound," and "Adonais." Of Shelley it might have been said, as of his own skylark:

"And sing still dost soar, And soaring ever singeth.

STEVENSON, ROBERT LOUIS.

This Scotch author was born in Edinburgh in 1850. He was bred an engineer, but studied law. In 1879 he came to the United States and married, afterward going to reside for a time in France. His contributions to periodicals began to attract attention, and soon he became widely known as a writer of more than ordinary ability.

Among his works are "An Inland Voyage," "Travels with a Donkey," "Familiar Studies on Men and Books," "New Arabian Nights," "The Dynamiter," etc. Mr. Stevenson's best known work is "Dr. Jekyl and Mr. Hyde," which has been dramatized and has met with popular favor. The gifted

author went to California in pursuit of health, being addicted to pulmonary complaint, and died in the Island of Samoa in 1896.

STOWE, HARRIET BEECHER.

This distinguished American author was born at Litchfield, Conn., on the 14th of June, 1812. She was the third daughter and sixth child of the celebrated Dr. Lyman Beecher. In early life she exhibited literary taste and gained distinction as a graceful writer.

In 1836, slie was married to Professor Calvin E. Stowe. In 1850 she went to Brunswick, Maine, where her husband had been appointed professor of Bowdoin College. While here she wrote her novel, "Uncle Tom's Cabin," and furnished it to the "National Era" (published at Washington) in weekly contributions. The success of this work has been without a parallel in the history of literature, its sale having gone up into the millions here and in Europe, where it has been translated into a number of different languages. When this remarkable story appeared the public mind in America was much agitated, and there can be no doubt that Mrs. Stowe's work hastened the great crisis that resulted in the Civil War and the destruction of the institution of slavery.

Mrs. Stowe was the author of other works that had great popularity, including "Sunny Memories of Foreign Lands," "Dred, a Tale of the Dismal Swamp," "The Minister's Wooing," "Oldtown Folks," etc. She wrote the "True Story of Lord Byron's Life," published in this country and in England. This work was severely criticised and brought down upon the devoted

head of the authoress a storm of indignation. Mrs. Stowe has written other works of great merit, and it may safely be said that no authoress of modern times in any country has achieved a greater success. She died July 1st, 1896.

SWINBURNE, ALGERNON CHARLES.

This English poet was born in 1837, and studied at Oxford, which he quitted without a degree. He burst upon the reading public with several poetical dramas, which, between 1861 and 1865, established his reputation as a poet of extraordinary brilliancy and even audacity. Subsequently he published "Poems and Ballads," together with other works which fully sustained his reputation. He delights in the weird, the mystical, the very suggestive, and has sometimes been criticised for the latitude of his opinions. His genius, however, is undisputed.

TAYLOR, BAYARD.

The works of this author have adorned our American literature and have been most favorably received by the reading public. Both as a poet and a traveller narrating his experiences in the different parts of the globe, he gained distinction. He was at one time an editor on the "New York Tribune," to, which he contributed a series of letters descriptive of his European travels. A number of volumes issued from his pen, and subsequently he was appointed American Minister to Germany. He died at Berlin in December, 1878.

TENNYSON, ALFRED.

For many years Lord Tennyson was without a living peer as a poet. It has been even said that no writer since the days of Shakespeare has exhibited such wenderful power of clothing poetic thought in captivating language. His poems are nothing less than creations, many of them sublime beyond comparison, and exhibiting the severest culture and most painstaking effort.

Tennyson was born in 1809 and was educated at Trinity College, Cambridge, where, in 1829, he obtained a prize medal for a poem in blank verse on "Timbuctoo." Soon after he published "The Lady of Shalott," "The May Queen," "The Lotus-Eaters," "A Dream of Fair Women," etc., etc. In 1849 he issued anonymously "In Memoriam," which many persons consider the finest of all his productions. Many of its remarkable couplets and stanzas have passed into the common speech of our time, and have become favorites of thoughtful persons and even of those religiously inclined.

Tennyson's fame grew through all his long life, and it is noteworthy that each new production appeared to increase his reputation and give him a stronger hold upon the affections of the reading public. More abrupt, more vigorous in thought, more rugged and massive as a poet than Longfellow, his versification was yet easy and graceful, although inferior in this respect to that of our own great poet, just mentioned, whose name is a household word everywhere. Tennyson died October 6th, 1892.

THACKERAY, WILLIAM MAKEPEACE.

A popular English novelist and humorist, born in Calcutta, in 1811. He was educated at the University of Cambridge, which he left without taking a degree. Having inherited from his father a considerable fortune, and not being compelled to labor for his own

livelihood, he chose the profession of an artist, but soon turned his attention to literature.

For many years he was a contributor to "Punch," and other periodicals, and gained great popularity. His works of fiction rivalled those of Dickens in popular favor, which is praise enough to be bestowed on any writer. One of his best and most popular works is "Vanity Fair, a Novel Without a Hero"; another is entitled "Pendennis." He visited the United States in 1852 and was very popular as a lecturer in all parts of the Union. Returning to England, he wrote the "Virginians," which is considered one of his best works of fiction. He died in December, 1863, leaving several daughters, some of whom have inherited their father's literary tastes and abilities.

MARK TWAIN (S. L. Clemens).

Under the *nom de plume* of Mark Twain an author appeared about 1867, whose quaint humor attracted immediate attention and soon gained a large circle of readers. There was a flavor of the western prairies about his productions and such odd conceits as marked him at once as a humorist of the first order.

Probably his best known work is "Innocents Abroad," which gave him considerable reputation. This was followed by "Roughing It," "Tom Sawyer," "Huckleberry Finn," and other volumes, all of which have been well received by all classes of readers. His ability in his chosen field is unsurpassed. He was a member of the firm that published the Personal Memoirs of President Grant. Mr. Clemens was born in Missouri in 1835.

WARNER, CHARLES DUDLEY.

One of our most popular American authors, born in Massachusetts in 1829, and educated at Hamilton College, New York. He studied law, and in 1857 was admitted to the Philadelphia Bar, but afterwards became a journalist at Hartford, Conn. "My Summer in a Garden," "Back-Log Studies," "My Winter on the Nile," and "Being a Boy," are among his best known works. In connection with Mark Twain he produced "The Gilded Age," a novel and play. He also compiled a valuable library of English literature, published in upward of forty volumes. His writings have a genuine humor and abound in graphic descriptions.

WHITTIER, JOHN GREENLEAF.

"The Quaker Poet." His writings are models of spiritual, benevolent, and patriotic sentiment. Having a warm sympathy with the poor and oppressed, he has employed his graceful pen with fine effect in the cause of humanity, and no author of our time is more beloved. Born at Haverhill, Mass., 1807; died 1892.

WILLIS, NATHANIEL PARKER.

A poet of distinction, whose "Sacred Poems" especially, have had a large circle of admirers. His versification is easy, and his descriptions abound in word painting of a high order. Willis was also successful as a journalist, and a favorite in general society. Born in Portland, Maine, 1807; died in 1867.

CHAPTER XLI.

Distinguished Orators and Statesmen.

HE Nineteenth Century has produced many of the most effective and celebrated orators known to history. While the preceding century was adorned by great English orators and statesmen, of whom Pitt and Burke are examples, it must be admitted by every impartial observer that a marvellous galaxy of brilliant men shine out in the last hundred years in peerless splendor.

BEECHER, HENRY WARD.

Few public men during the century achieved greater distinction than this gifted writer and pulpit orator, of whom it has been said "he was a grand outgrowth of American institutions."

He was a son of Dr. Lyman Beecher and was born in Litchfield, Conn., on the 4th of June, 1813. He appears to have given in childhood but little promise of distinction. But even while a boy he proved that he inherited something of the controversial ability of his father. A forward schoolboy among the elder scholars had got hold of Paine's "Age of Reason," and was flourishing largely among the boys with objections to the Bible. Henry privately looked up Watson's "Apology," studied up the subject, and challenged a debate with the big boy, in which he came off victorious by the acclamation of his schoolfellows. This occurred when he was about eleven years old.

He manifested at this period little inclination for severe study, but had conceived a passionate desire to go to sea. His father adroitly used this desire to induce him to commence a course of mathematics with a view to qualify himself to become a naval officer. He applied himself energetically to his new

studies, "with his face to the navy, and Nelson as his beau ideal." But not long afterwards there occurred in that section of the country a religious "revival," and young Beecher, with many others, was powerfully impressed. The result was that the naval scheme was abandoned, and his thoughts were directed to the pulpit as his natural and proper sphere.

After going through the preparatory studies, he entered Amherst College, where he graduated in 1834; and soon after he commenced the study of theology at Lane Seminary, under the direction of his father. He began his ministerial course at Lawrenceburg, Indiana, but removed soon after to Indianapolis. In 1847 he became pastor of Plymouth Church (Congregational) in Brooklyn, where he gathered around him an immense congregation. He was also one of the most popular writers and most successful lecturers in America. His success as a public speaker was due not so much to what is popularly termed eloquence as to a flow of racy and original thought, which, though often enlivened with flashes of quaint humor, was not without an undercurrent of deep moral and spiritual earnestness.

BLAINE, JAMES GILLESPIE.

Mr. Blaine was born of Scotch-Irish parentage at West Brownsville, Pa., January 31, 1830. As a boy at school he excelled in literature and mathematics, and at the early age of thirteen entered Washington College in his native county, graduating in 1847. Subsequently he became a teacher in the military institute at Blue Lick Springs, Ky., where he married Miss Harriet Stanhope, a teacher in a neighboring seminary. Soon after his marriage he removed to Pennsylvania, and after studying law for a short time became a teacher in the Institution for the Blind at Philadelphia. In 1854 he removed to Augusta, Me., entering the journalistic ranks, first as editor of the "Kennebec Journal," and later as editor of the "Portland Advertiser."

In 1862 the Republicans elected him to the House of Representatives, and for 20 years he served in one or the other of the two Houses of Congress. During the war he favored all judicious and practical resolutions for its vigorous prosecution, and at its close he bore an active part in the reconstruction measures of the country. The 14th Constitutional Amendment was called the "Blaine Amendment," as it was formulated and earnestly advocated by him. He was largely instrumental in the negotiation of a treaty with England, in which the doctrine of perpetual allegiance was abandoned, and Great Britain accepted the American principle of equal rights and protection for adopted as well as for native citizens. From 1869 to 1875 Mr. Blaine was speaker of the House of Representatives, and his record in this capacity is generally conceded to have been a brilliant one.

In 1876 Mr. Blaine was elected to the United States Senate, and at once became a most prominent and efficient member of that body. In the Republican national convention of that year he was a prominent candidate for nomination to the presidency of the United States, and lacked only 28 votes out of a total of 754 of receiving the nomination. At the Republican national convention in 1880 his friends again presented his name for nomination, and on the first ballot the vote stood: Grant. 304; Blaine, 284; Sherman, 93; Edmunds, 34; Washburn, 30; Windom, 10; Garfield, 1. On the election of Mr. Garfield, Mr. Blaine accepted the appointment of Secretary of State, filling the office with rare ability and success, until the death of the president, when he retired from active public work, and began to write his famous historical work, entitled, "Twenty Years of Congress."

In 1884 Mr. Blaine received the Republican nomination for President, but after a vigorous contest, failing to secure the electoral vote of the State of New York by the narrow margin of 1,047 votes out of a total of over 1,200,000, he was defeated in the general election. He spent the ensuing four years at work on his book and in foreign travel.

At the time of the nominating convention in 1888, Mr. Blaine was in Europe, and by formal letter declined to permit his friends to present his name as a candidate for the presidency. He returned, however, in time to aid efficiently in the canvass for Mr. Harrison, and on the election of the latter again accepted the appointment as Secretary of State. Among the important services rendered in this office he took a

leading part in settling the Samoan difficulties in the treaty between Germany, England and the United States, and successfully invited and most efficiently presided over the Pan-American Congress held in Washington. In June, 1892, Mr. Blaine resigned his office to become a candidate for the Republican Presidential nomination, but failed to receive it. He died in 1893.

BRIGHT, JOHN.

For many years Mr. Bright was accorded the great honor in England of being "the tribune of the people," defending them by his peerless eloquence, his untiring efforts and commanding abilities, from unlawful oppression, and advocating just and equal rights for all citizens. He was a power in Parliament and the nation.

He was born in 1811, and was educated at a Friends' school, his family being members of that sect. He early enlisted in the Anti-Corn-Law League, and was elected to Parliament for the city of Durham in 1843. He remained in Parliament many years, exercising great influence by his sturdy honesty, his liberal opinions and impassioned eloquence. As a consistent friend of liberty and equal rights, he testified his sympathy for the Federal Government during our Civil War by a number of public speeches that attracted much attention.

Mr. Bright was an ardent advocate of the Reform bill, granting the right of suffrage to every householder in a borough, which was signed by Queen Victoria on the 15th of August, 1867. In March, 1868, he made a powerful address on Ireland, of which the London "Spectator" said: "Mr. Bright's grand speech did more to draw the noblest men of all parties nearer to each other than long years of discussion had effected before."

He declined the office of Secretary for India, which was offered him, but entered the cabinet of Mr. Gladstone as President of the Board of Trade in 1868, from which he was compelled by ill health to retire in 1870. Died March 27, 1889.

BROOKS, PHILLIPS.

This eminent American clergyman was born in Boston, December 13, 1835. He graduated at Harvard College in 1855, and studied at the divinity school near Alexandria, Virginia, and was ordained in 1859. From this year nutil 1869 he held Episcopal rectorships in Philadelphia.

Mr. Brooks was a man of most imposing presence, possessed of rare scholar-ship and eloquence, and attracted marked attention from the beginning of his public ministry. His discourses were profound in thought, elevated in spiritual sentiment, abounded in gems of rare beauty, and deeply impressed the cultivated audience that listened to them. Having been called to a rectorship in Boston, his fame increased, and a short time before his death, which occurred in January, 1893, he was elevated to the house of Episcopal Bishops.

CHOATE, RUFUS.

A scholarly American lawyer, born in Essex, Massachusetts, October 1st, 1799, graduated at Dartmouth in 1819, and was admitted to the bar in 1823. He sat in Congress from 1830 to 1834, when he settled in Boston. Here his singular eloquence rapidly advanced him to the place of leader of the Massa-

chusetts bar; indeed, it has been claimed for him that he was the most eminent advocate New England, or even America, has produced. After a term in the United States Senate, 1841–45, he returned to his profession; in 1859, his health giving way, he sailed for Europe, but stopped at Halifax, Nova Scotia, where he died July 13. His writings, with a memoir, were published at Boston in 1862,

CLAY, HENRY.

When reference is made to America's greatest orators it is customary to mention the name of Henry Clay among the very first. He was frequently called, "The Mill Boy of the Slashes," from the fact that he was a poor boy and was born in a district in Virginia called "the Slashes." The date of his birth was April 12th, 1777, and he died at Washington, June, 1852.

He served successively in the Kentucky Legislature, State Senate, United States House of Representatives and Senate; and was one of four candidates for president in 1824, and also a candidate in 1844, being defeated both times.

In person, Mr. Clay was tall and slender, had a voice of wonderful range and sympathy, was remarkably easy and graceful in manner, and few orators who ever lived possessed such persuative power. "Take him for all in all," says Parton, "we must regard him as the first of American orators; but posterity will not assign him that rank, because posterity will not hear that matchless voice, will not see those large gestures, those striking attitudes, that grand manner, which gave to second-rate composition first-rate effect. His meeches will long be interesting as the

relics of a magnificent and dazzling personality, and for the light they cast upon the history of parties."

DEPEW, CHAUNCEY M.

This distinguished citizen, prominent in railroad affairs and politics, was born in Peekskill, N. Y., in 1834, and graduated from Yale College in 1856. As a young man Mr. Depew came into notice as an effective stump-speaker and an orator who could adapt himself to almost any public occasion. Genial in disposition, with an unlimited fund of anecdote and remarkable fluency of speech, he has become widely known and universally popular.

In 1861 he was a member of the Legislature of New York, and two years later was elected Secretary of State, subsequently holding the position of President of the "Vanderbilt Roads." His writings consist of addresses and orations delivered on various occasions all of which are finished productions and place their author among the foremost orators of America. Mr. Depew has always taken an active interest in politics. His services are sought in every Presidential campaign and what he has to say commands wide attention. He was elected to the United States Senate from New York in 1899, and took his seat on December 4th of that year.

DOUGLASS, FREDERICK.

This American orator was born in Maryland in 1817, his father being a white man and his mother a negro slave. Permitted to work in a shipyard in Baltimore, he escaped in 1838 to New York and thence to New Bedford, Massachusetts, where his negro employer, who had just read Scott's

"Lady of the Lake," induced him to substitute Douglass for the name of Bailey, conferred on him by his mother.

In 1841 he attended an Anti-slavery Convention at Nantucket, and spoke so eloquently on the subject of slavery that he was employed as agent of the Massachusetts Anti-slavery Society, and lectured for four years with great success. In 1845 he commenced a lecturing tour in Great Britain, where a contribution of seven hundred and fifty dollars was made to buy his freedom. Returning to America he established in 1847, at Rochester, New York, "Frederick Douglass' Paper," a weekly abolition newspaper.

Mr. Douglass was appointed to a number of Federal offices at Washington, which he filled with credit to himself and satisfaction to the several administrations that selected him for the various positions in which he was placed. In person he was tall, well proportioned, had a rich, mellow voice, good command of language, and at times in his public efforts rose to the highest order of eloquence.

EVERETT, EDWARD.

He was born at Dorchester, Massachusetts, April 11th, 1764, and graduated at Harvard in 1811. At the age of uineteen he had already gained a high reputation as a Unitarian preacher in Boston. In 1815 he was elected professor of Greek in Harvard College; and to qualify himself more thoroughly for his work he visited Europe, where he resided for four years, and had a distinguished circle of acquaintance. Victor Cousin pronounced him "one of the best Grecians he ever knew." In 1820 Everett became editor of the

"North American Review," and in 1824 a member of Congress, sitting in the House of Representatives for ten years. In 1835–38 he was four times elected governor of Massachusetts; and in 1841–45 he was minister plenipotentiary at the court of St. James. While in England he received the degree of D.C.D. from Oxford, and LL.D. from Cambridge and Dublin.

On his return to America he was elected president of Harvard College; on the decease of Daniel Webster he became Secretary of State; and in 1853 he was returned to the United States Senate. In 1860 he was nominated by the Constitutional Union party for the vice-presidency of the United States, receiving 39 electorial votes out of 303. He died January 15, 1865. Everett's principal works are "A Defence of Christianity" (1814); several fine poems; and his eloquent "Orations and Speeches" (4 vols., 1836-59), covering a wide range of subjects, and indicating a varied, vigorous and flexible genius. His Memoir of Daniel Webster is prefixed to the collective edition of his friend's works (6 vols., Boston, 1852.)

GAMBETTA, LEON.

A French advocate, statesman and renowned orator, born at Cahors, 1838, of Genoese extraction. He early distinguished himself at the bar by his facile address, and, entering into the political arena, became one of the leaders of the advanced Republican party. Elected a member of the Corps Legis latif in 1869, Gambetta, on the fall of the empire, September 4, 1870, became a member of the Government of National Defence; distinguished himself by his energy, and on Paris being be-

sieged by the German armies, did not hesitate to depart from that city by means of a balloon, in order to get to Bordeaux, from where, for some months, he exercised almost dictatorial power, continuing the war with perhaps more patriotism than prudence.

On the election of M. Thiers as President of the French Republic, he again resumed his place in the National Assembly, in the deliberations of which he continued to take an active part. In 1879, he succeeded M. Grevy as President of the Chamber of Deputies, and in 1881 was made Premier, a position he held but a short time, owing to disagreement with the Chamber on political questions. He died in 1883.

GARFIELD, JAMES A.

The twentieth President of the United States, was born in Cuyahoga County, Ohio, November 19, 1831, graduated from Williams College, Mass., in 1856, and adopted the profession of law. In 1856–60 he was a member of the Ohio Senate, and in 1861 entered the army as Colonel of the 42d Ohio Volunteers, and was made Brigadier-General in 1862. In 1863 was appointed Chief of Staff to General Rosecrans, and served with him up to the battle of Chickamauga; for gallantry in this action he was promoted to Major-General of the Volunteers (September 19, 1863).

He resigned from the army to take his seat in the 38th Congress from Ohio, and was placed on the Committee of Military affairs. He continued to serve in Congress upon the most important committees and as Chairman of the Committee on Military Affairs, and also as Regent of the Smithsonian Institute. In 1880 he was elected Senator from

Ohio, and at Chicago, on June 8, 1880, selected as the nominee of the Republican party for President of the United States. On the 35th ballot, the vote stood, Grant, 313; Blaine, 257; Sherman, 101; Garfield, 50, besides other scattering votes. On the 36th ballot, the vote counted 309 for Garfield, which gave him the nomination. He was elected by 219 votes in the Electoral College against 150 for Hancock.

He died at Long Branch, N. J., September, 19, 1881, from bullet wounds inflicted in Washington, D. C., by an assassin, July 2, 1881, and was buried at Cleveland, Ohio, amid the lamentations of the whole civilized world. Mr. Garfield was born to command. He was a giant in intellect, an impressive orator, a true-hearted man and an ornament to his country, to the highest position in the gift of which, he rose from a poor canal driver in his boyhood.

GIBBONS, CARDINAL.

This distinguished prelate of the Papal Church was born in Baltimore in 1834, and baptized in the Venerable Cathedral of that city, in the very diocese of which he afterward became archbishop. At the age of ten he was taken by his father to Ireland, where he began preparatory studies with a view to the priesthood. His brilliant talents marked him from the outset for a distinguished position in his calling.

Step by step he rose to fame and influence, and was especially successful in gaining the confidence of his superiors, who looked upon him not only as a brilliant scholar and orator, but also as a wise and faithful counsellor. On June 30th, 1886, he was elevated to the position of Cardinal on the 25th anni-

versary of his ordination to the priesthood. Although raised to so high a rank, Cardinal Gibbons has always maintained a quiet, unassuming deportment, and has greatly endeared himself to the myriads of his flock in America. Wise, generous, learned, the author of that noted book, "The Faith of our Fathers," which stands as the American apology for Catholicity in the nineteenth century, Cardinal Gibbons is in every way fitted to fill the position at the head of the hierarchy in the United States. He has always been loyal and devoted to those great principles of truth and freedom which ensure the welfare of the state and of the people at large.

GLADSTONE, WILLIAM EWART.

Mr. Gladstone may be called the most eminent English statesman, orator, and author of the nineteenth century. He was born in Liverpool in December, 1809, and graduated at Oxford in 1831, having gained the highest distinction in classics and mathematics. He was elected to Parliament by the Conservatives in 1832, and appointed a lord of the treasury by Sir Robert Peel in December, 1834.

From this time on Mr. Gladstone advanced steadily from one position to another until he was chosen to the very responsible office of chancellor of the Exchequer in the cabinet of Lord Palmerston. From being a Conservative Mr. Gladstone gradually adopted Liberal opinions and principles until in 1868 he became prime minister. His speeches and orations in Parliament and out were the wonder and admiration of even his opponents. He contemplated great measures for the welfare of his country, including the extension of the

suffrage, the formation of public schools and the disestablishment of the Irish Church.

Mr. Gladstone was preeminently a scholar, and through all his long and distinguished career he found time to indulge in authorship, some of his published works showing the marked ability which characterized him as a statesman and orator. He passed into a ripe old age laden with honors, and died May 16, 1898. It is enough to say that Mr. Gladstone must be named in that bright galaxy of distinguished men which includes our own Webster and Clay, while in some respects he is easily superior to every other statesman and orator the century has produced

GOUGH, JOHN B.

Orator and reformer, whose lectures on temperance and other subjects, delivered throughout America and Great Britain, produced the highest oratorical and dramatic effects, was rescued when a young man from a life of dissipation, and soon rose to unparalleled fame as a platform speaker and temperance advocate. Born at Sandgate, Kent, England, 1817; he came to New York when but a boy, and had a hard struggle with poverty. His later life was marked by comfort and the most happy home influences. Stricken with apoplexy while lecturing at Frankford, near Philadelphia, and died, 1886.

GRADY, HENRY WOODFIN.

He was born in Athens, Ga., May 17, 1851, and died in Atlanta, Ga., December 23, 1889. No written memorial can indicate the strong hold which this young orator had upon the Southern people. Although he died at the early age of thirty-eight, his fame was world-

wide, and there was perhaps no man in the nation more honored and respected, both North and South, than was this phenomenally gifted writer and speaker during the last few years of his life.

On the 21st of December, 1887, Mr. Grady, in response to an urgent invitation, delivered an address at a banquet of the New England Club, New York, which attracted wide attention. This, and similar speeches, did much to wipe out the prejudices engendered by the war, bridge the bloody chasm, and draw the two sections into a closer union.

HARRISON, BENJAMIN.

Harrison is an honored name in the history of our country, several members of this family having distinguished themselves in public life, and two of them, William Henry and Benjamin having been elected to the highest office in the nation. William Henry, "the hero of Tippecanoe," was elected President in 1840 by a large majority over Van Buren, but survived his inauguration only one month.

Benjamin Harrison was elected to the same high office in 1888, receiving the vote of all the old free States except Connecticut and New Jersey. Four years later he was defeated by Grover Cleveland, the most commanding figure in the Democratic party during the last two decades of the century.

Mr. Harrison was born at North Bend, Ohio, in 1833, and graduated at Miami University in 1852. He left his law practice in Indianapolis to become colonel of the Seventieth Indiana Regiment, and during the Civil War served in the Army of the Cumberland. He participated in the capture of Atlanta

and was made brigadier-general. In 1880 he was elected from Indiana to the United States Senate and was soon regarded as one of the strong men in the upper house of Congress. His erudition, forcible speech and honesty of purpose gave him an enviable name, and these qualities he exhibited as the Chief Executive of the nation.

After retiring from the presidency Mr. Harrison gave lectures upon law in California, and returned to his law practice in which he was always considered as holding the highest rank.

LINCOLN, ABRAHAM.

Next to the name of Washington none stands higher on the roll of illustrious Americans than that of Abraham Lincoln. Indeed, the sixteenth President of the United States, the skillful pilot who guided our ship of state through the stormy period of the great Civil War, is one of the most majestic figures in history. The occasion was great, and he was not only equal to it, but rose above it in such magnificent proportions as to impress the whole civilized world. While he cannot be called the "Father of his Country," he has been denominated its saviour. The tragic close of his life by the hand of an assassin gave him somewhat of the character of a martyr and has rendered his memory peculiarly sacred.

Mr. Lincoln was born in Hardin County, Kentucky, February 12, 1809. He learned the little that the backwoods schools were capable of teaching, and was employed in rough farm-work until at the age of nineteen he took on a flat-boat a cargo to New Orleans. This was followed later by a second trading voyage, both of which showed

the enterprise and self-reliance of the future celebrity. He studied law, removed to Springfield, Illinois, and soon attracted attention as a rising young lawyer of marked ability. He was elected to the State Legislature in 1834 and served until 1842, having by this time become a leader among the Whigs. In the latter year he was married to Mary Todd, daughter of Robert Todd of Lexington, Kentucky.

In 1846, Mr. Lincoln, was elected to Congress, but his service was limited to a single term. In 1854, Stephen A. Douglass, United States Senator from Illinois, by his Kansas-Nebraska bill, repealed the Missouri Compromise of 1820, and reopened the question of slavery in the territories. When the Republican party was organized in 1856 to oppose the extension of slavery, Mr. Lincoln was its most prominent representative in Illinois. A public debate on the political questions of the hour between him and Senator Douglass in 1858, attracted the attention of the whole country and brought out brilliantly Mr. Lincoln's great power in debate, his ready eloquence, his practical common sense, his fund of humor, and placed him among the foremost men of the country, preparing the way for his election to the Presidency in 1860.

He did all that lay in his power to avert the Civil War, but plainly avowed this intention to uphold, according to his oath, the Constitution and administration of the laws of the country. How ably, how wisely, how fearlessly, and with what fidelity to his country's cause he did this, with what charity toward his enemies he carried himself, with what far-sighted wisdom his public

measures were promulgated, and how he stood like a massive, unmovable tower of strength through the great conflict that rocked our nation, is now a matter of well-known history.

The Federal arms having been victorious after many defeats, and Mr. Lincoln having proved himself to be master of the situation, he was re-elected by a large popular majority in 1864. In his second inaugural address in March, 1865, he rose above the ordinary range of such occasions, and like an inspired prophet set forth the profound moral significance of the war he saw drawing to a close. A month later he entered Richmond, from which Grant had driven Davis and Lee.

On the 14th of April, 1865, he was assassinated by J. Wilkes Booth, an actor, and died the next morning. The national rejoicing over the return of peace was turned into grief for the martyred President. The whole civilized world joined in expressions of sorrow for his fate.

McKINLEY, WILLIAM.

The highest distinction that can be conferred by our country has been bestowed upon this American statesman, who was born at Niles, Ohio, February 26, 1844. He enlisted in the U. S. army in May, 1861, as a private soldier in the 23rd Ohio Volunteer Infantry, and was mustered out as captain of the same regiment and brevetmajor in September, 1865. He was prosecuting attorney of Stark county, Ohio, 1869-71. Being elected to Congress in 1877 he lost his seat, through some technicalities in the election, by vote of the house in 1884, but was reelected and sat continuously as a member of Congress from 1885 to March 4, 1891.

He became famous as the author of the protective tariff bill passed by Congress in 1890, a measure which was largely modified by Mr. Cleveland's administration, but the wisdom of which has been claimed by Mr. McKinley and his party as being fully vindicated. In 1896 he was nominated with great enthusiasm for the Presidency by the Republican party, and was elected in November of that year by an immense popular majority. In his conduct of the Spanish-American War and his treatment of all the difficult questions arising from time to time, his course has been approved by a large majority of his countrymen and his fame as an orator and statesman has been established.

MOODY, DWIGHT LYMAN.

This celebrated American evangelist was born at Northfield, Mass., January 5, 1837. He came of poor parentage and was deprived of educational advantages in his boyhood. For a while he was a salesman in Boston, and in 1856 went to Chicago where he engaged with remarkable success in missionary work. In 1870 he was joined by the well known singer, Ira D. Sankey, who was born at Edinburgh, Pa., in 1840.

In 1873, they visited Great Britain as evangelists, attracting vast crowds and laboring with phenomenal success. They afterwards returned to America and worked together in all the large towns, awakening great enthusiasm among the churches and exerting an influence such as had never been known before in evangelistic work. Mr. Moody probably addressed a larger number of people than any preacher of modern or

ancient times, his audiences ranging from 5,000 to 20,000 and upwards.

Possessed of a strong physique, a hearty genial manner, a voice of great penetration and power, a fluent utterance, a simplicity necessitated by his lack of education, but which added greatly to the effect of his discourses, he was for nearly forty years the most conspicuous figure in religious work.

At his home in Northfield, Mass., Mr. Moody planted schools for the education of both sexes, raised hundreds of thousands of dollars to establish and equip them, and left them as a monument to his liberal spirit, his great financial ability and his untiring energy in his labors for the welfare of others. Mr. Moody died in December, 1899, and Christian people throughout the civilized world expressed their sense of bereavement, and with glowing eulogies honored the man and his work.

REED, THOMAS BRACKETT.

Few American statesmen have had the reputation of being possessed of such eminent ability as this legislator, who was born in Maine, October 18, 1839. He graduated from Bowdoin College in 1860 and studied law. In 1864 he entered the navy as acting assistant-paymaster, remaining in that position until 1865. He then resumed his profession. In 1868 he was a member of the lower branch of the Maine legislature, and next session was a senator. He was attorney-general of the State for two years, and city solicitor for Portland for four years.

He was elected a member of Congress in 1876, and afterward was continuously re-elected until he resigned his position in 1899 for the purpose of resuming the practice of law in New York City. In the Fifty-first Congress he was elected speaker of the House of Representatives, and the vigor of his administration attracted widespread attention. He was easily the leader of his party and during the latter part of his career in Congress was a prominent candidate for nomination to the Presidency.

SALISBURY, LORD.

This English statesman was born in 1830 and educated at Eton and Oxford. In 1866, having entered Parliament, he was secretary of state for India; became minister of foreign affairs in 1878; represented Great Britain at the Berlin congress; became Prime Minister in 1885, and in addition to these, has held other public offices which required a statesman of experience and ability.

In all his public career Lord Salisbury has commanded the confidence of the conservative element of Great Britain, and while his name has not been identified with as many measures of reform as Mr. Gladstone's was, yet he has been a safe and wise leader in and out of Parliament, and few statesmen in Great Britain have been more successful or have given better service to the country.

SHERMAN, JOHN.

While not so brilliant an orator as some of his contemporaries, Mr. Sherman has been for many years a prominent figure in Congress and in the cabinets at Washington. He was born at Lancaster, Ohio, in 1823, was educated at Lancaster, studied law with his brother at Mansfield, and afterward practiced for ten years. In 1855 he was elected to the Thirty-fourth Congress in the interest of the Free Soil party, and

was re-elected to the next two Congresses. He became a power on the floor and in committees, and was recognized as the foremost man in the House particularly in matters affecting finance.

In 1861 he was chosen to the United States senate where he at once became a leader. From this time on he was a well-known figure in Washington, and on two different occasions efforts were made by his friends in the Republican party to secure for him the nomination for the Presidency, which, however, were not successful. His name is associated with the resumption of specie payments and other financial measures which proved his great acumen as a financier.

In person, Mr. Sherman is tall and slender, has a convincing manner of speech, and few men have possessed greater influence over thoughtful and intelligent leaders of popular opinion.

SPURGEON, CHARLES HADDON.

This noted English preacher, who has been pronounced the greatest since the days of the Apostles, was born in 1834, and was educated in a master's school near Cambridge. Against the opposition of many of his relatives who were Independents, he adopted Baptist views, and became very active in religious work. He preached his first sermon when only sixteen years of age, and a little later preached at Waterbeach near Cambridge, becoming pastor of the chapel there. This edifice soon failed to hold the crowds that came to hear the well known young preacher.

Invitations from London having come to him, he finally accepted the pastorate of the new Park Street Chapel, addressing his first congregation there in 1853.

The chapel was soon found to be too small and it was enlarged. The first enlargement, however, proved insufficient, and its size was again increased, and finally it became necessary to build the Metropolitan Tabernacle, which was opened in 1861 and accommodated some five thousand people. Here the famous preacher gathered immense audiences, and carried on a remarkable work in the education of young men for the ministry, and in establishing a home for orphans.

After 1855 Mr. Spurgeon published one sermon a week, the whole number being upwards of two thousand. Possessed of a wonderful voice of vast range and mellow qualities, Mr. Spurgeon could easily address twenty thousand people in the open air and make himself distinctly heard by this vast multitude. His labors, however, told upon him and his death occurred in 1892.

SUMNER, CHARLES.

This distinguished American lawyer and senator was born in Boston, Massachusetts, in 1811, and graduated at Harvard College in 1830. He soon afterward published several volumes of law books which exhibited profound learning. Having travelled abroad several years, he pronounced in Boston on the 4th of July, 1845, an oration on "The True Grandeur of Nations," which attracted much attention in the United States and in Europe, the design of which was to promote the cause of peace.

Mr. Summer was elected to the United States Senate in 1850 as the successor of Daniel Webster. During his long public career he was noted for his scholarty attainments, his brilliant orations

and strong anti-slavery sentiments. All of his public addresses were very elaborate, expressed lofty and patriotic views, and are now among American classics. The death of Mr. Sumner occurred in 1874.

TALMAGE, THOMAS DeWITT.

This widely-known clergyman was born in New Jersey in 1832, and gradnated at the University of the City of New York in 1853. After holding various Dutch Reform pastorates, he settled over a Presbyterian church in Brooklyn in 1869. Having been deprived by fire of his Tabernacle on two different occasions, he removed to Washington in 1895. He has published several volumes of sermons and other works of a miscellaneous character. His style is graphic and often humorous, and his attractiveness as a public speaker drew crowds of hearers. In 1899 he retired from his church in Washington and devoted himself to literary work.

VICTORIA, QUEEN.

Among the most noted women of the century a place must be accorded to the Queen of Great Britain and Empress of India, whose reign has not only been distinguished by a longer period than was ever before attained by any English sovereign, but by remarkable prudence, conspicuous womanly demeanor, great wisdom as a ruler and profound concern for the welfare of the many millions of subjects who owe allegiance to the "empire on which the sun never sets."

Victoria was born at Kensington Palace, May 24, 1819. She succeeded her nucle, William IV., June 20, 1837, as Victoria I., and her coronation was

celebrated in Westminster Abbey June 28, 1838. She was married February 10, 1840, to his late Royal Highness Prince Albert of Saxe-Coburg Gotha, by whom she had numerous issue. In 1897 the Queen celebrated the 60th anniversary of her reign amid unparalleled rejoicings on the part of her subjects, and congratulations from all the rulers of the world.

VINCENT, JOHN H.

He was born in Tuscaloosa, Alabama, in 1832, studied for the Methodist ministry and became an itinerant preacher. He edited the New York "Sunday School Journal," and in 1874 founded the Chautauqua Assembly. Mr. Vincent was intimately connected with educational work at Chautauqua and elsewhere until he became in 1888 a bishop of the Methodist Episcopal Church.

WEBSTER, DANIEL.

One of America's most distinguished statesmen and orators, whose intellectual and oratorical triumphs at the bar and in the forum were long the pride of his country. He had warm political friends and bitter enemies. The latter accused him of a time-serving spirit, and an unscrupulous ambition to obtain the Presidency. His literary style is pure and elevated, and all his writings, including his political speeches, bear the stamp of the highest order of genius.

Mr. Webster was born at Salisbury, New Hampshire, and was educated at Dartmouth College. He studied law, tose rapidly in his profession and was soon regarded as a fit antagonist for Jeremiah Mason, who was regarded as the greatest lawyer in the State, and

was many years older than Webster. He was elected a Representative in Congress and took his seat in 1813. Here he distinguished himself by his legal acumen, his commanding presence and powerful eloquence.

He continued to serve in the House of Representatives until 1828, when he was made United States Senator, representing Massachusetts. He gained great fame by a number of public addresses on important occasions, such as the celebration of the landing of the Pilgrims, the dedication of Bunker Hill Monument, etc., while his memorable reply in Congress to Hayne, of South Carolina, ranked him as an orator without a peer. It was in this speech that he uttered the famous words, "Liberty and Union, now and forever, one and inseparable."

Mr. Webster was accused by his opponents of being over ambitions to obtain the Presidency, and of truckling to the slave power in the endeavor to obtain a nomination for that high office. Be that as it may, he did not succeed, and after a career whose brilliancy, all things considered, has searcely been equalled in modern times, he died in 1852 at Marshfield, Massachusetts, leaving behind him a great name in our country's annals.

WILLARD, FRANCES E.

One of our most distinguished American women is the subject of this sketch. No one was more widely known or universally respected. She possessed talents of an unusual order, a warm and earnest spirit, untiring energy, the ability to influence others, and seemed to be lacking in none of those qualities essential to successful achievements.

She was an orator of the first rank, and' therefore deserves an honored place among the conspicuous names that stand out on these pages.

Miss Willard was born in Church-ville, N. Y., September 28, 1839, and was educated at Milwaukee and the Northwestern Female College at Evanston, Ill., from which she graduated in 1859. She became Professor of Natural Sciences there in 1862, and was principal of Genesee Wesleyan Seminary in 1866-67. She was known throughout the country for her devotion to the cause of reform, especially that branch of it embraced in temperance work.

In 1874 she gave up all other engagements to identify herself with the Woman's Christian Temperance Union, and was immediately made corresponding secretary, discharging the duties of this office until 1879, when she was elevated from the position of secretary

to that of president. In 1876 she assisted Dwight L. Moody in his evangelistic work and rendered efficient service. She organized the Home Protection Movement and sent an appeal from nearly 200,000 people to the Legislature of Illinois, asking the temperance ballot for women. In 1888 she was made president of the American branch of the International Council of Women and the World's Christian Union. In 1892 she visited England and received an enthusiastic welcome from the friends of reform in that country. She was at the head of the Women's Committee of Temperance Meetings at the World's Fair in 1893.

Miss Willard was one of the most celebrated women of the century, a renowned leader whose name will long be honored, not only by her own sex, but by everybody. She died in New York, February 18, 1898.

CHAPTER XLII.

Various Celebrities and their Achievements.

N a great variety of pursuits individuals with exceptional talents distinguished themselves during the century. These comprise Military and Naval Commanders, Inventors, Explorers, Artists, Musicians, Financiers, Statesmen, Orators, Poets, Novelists, Actors, etc. The greatest of these are here sketched, and their successes are noted.

ALLISON, WILLIAM B.

The career of this distinguished Senator affords another striking proof of the power and influence belonging to the individual man. Money talks for some men, social influence for others, learning and culture for others, and brains for others. The last-named element of success belongs especially to Mr. Allison. Combined with it is his sterling integrity and a character that has never been called in question.

For a long time he has stood in the halls of the United States Senat, taking an active part in all its deliberations and debates. He is considered a statesman, eminently wise and safe. While it may be said that he has gained large experience in Congress, it may also be said that he brought his experience with him. He was a man of public affairs, prominent and widely known before going to Washington. It was but natural that, having gained a local celebrity, he should be transferred to the wider field.

His native State is Ohio, where he was born at Perry, Wayne County, March 2, 1829. Like many others who have molded the affairs of the nation, he spent his early years upon a farm.

In 1862 Mr. Allison was elected to the 38th Congress as a Republican. He served in this capacity with such fidelity and distinction that he was reelected to the three succeeding Congresses. His re-election, his neighbors were accustomed to remark facetiously, was chronic. He served continuously as a member of that body from December 7, 1863, until March 3, 1871. Often he was appointed on important committees, and, being a willing worker, was soon known as one of the most industrious and active members of the House.

At the same time he kept in close touch with his constituents at home. They marked his achievements and were proud of his advancement in the estimation of the public. He was always found at the post of duty, never shuffled or evaded any question of importance, was always willing to have his opinions known, and was always able to give a reason for the faith that was in him.

In 1873 he was elected by the Legislature of Iowa to the United States Senate to succeed James Harlan, and subsequently was re-elected several times almost without opposition.

RMOUR, PHILIP D.

The ancient classic nations were in the habit of speaking of the seven wonders of the world. If we were asked to give a list of the seven wonders of America the city of Chicago would most assuredly be one of them. It sits like a queen at the feet of the great chain of lakes which, taken together, are nothing less than an immense inland sea. Its growth has been rapid and phenominal. Within the memory of living men it was only a village, located on marshy ground, then giving no promise of becoming the great metropolis of the West.

While many causes have combined to render Chicago a city whose growth has been extraordinary, it is no less true that much is due to the enterprise of her citizens, among whom are numbered men of broad ideas, exceptional business ability, and an integrity made of gold unmixed with dross. One of these citizens whose remarkable successes have given fame to Chicago is Mr. Philip D. Armour—a full-grown man, looked at from every point of view, whose business career, whose unimpeachable character and faithful endeavors in every walk of life, have made him conspicuous in the city of his residence and widely known throughout the country. He was born in Stockbridge, N. Y., May 16, 1832, and received his education in the district school of his native town.

Like many young men, he was under the impression that some other part of the country than the one in which he was born and reared would afford a wider field for activity and success, and started out to seek his fortune, going to California in 1851. This was only two or three years after the discovery of

gold, but Mr. Armour found, even at that time, that fortunes are not picked up in a day, and he was doomed to disappointment. In 1856, he left California, convinced that he could do better elsewhere.

Mr. Armour went to Milwaukee, Wis., where he embarked in the commission business, meeting with the success that might be expected from a man of his ability. In connection with John Plankington, of Milwaukee, he established a packing house, and for a number of years devoted to the business his time and energies. This was in 1863, and in 1868 the Chicago establishment of P. D. Armour & Co. was founded, which has branch houses in Kansas City and New York, and extends its trade all over the world. These packing houses are immense establishments, and, except by actual observation, no one would be able to get an accurate idea of the vast business that is carried on.

One of the most magnificent presents Chicago ever received was from him, and the Armour Institute, fully endowed, stands not only as one of the finest ornaments of the city, but also as a monument that will perpetuate the memory and philanthropic disposition of the founder.

BARTHOLDI, FREDERIC AUGUSTE.

A curious irony of fate has decreed that the man whose genius has erected one of the most impressive monuments of peace was born in a land that has for ages been the cause and the scene of war. The man who gave the best efforts of his life to commemorating international amity is by the remorseless decree of conflict a man without a country, his native home the spoil of the

traditional enemies of his race. It was at Colmar, in the vexed province of Alsace-Lorraine, that Frederic Auguste Bartholdi was born, on April 2, 1834, and a true Alsatian he has ever been.

Many of his best works are studies drawn from that country, often patriotic in spirit. When the war of 1870 rolled the tide of devastation over his native fields, he was the bravest of the brave in the front rank, vainly striving to repel the resistless invader. And when German swords cut the provinces away from France, and German bayonets pinned them fast to the German Empire again, he forsook his home rather than live under a foreign flag; changing his skies, but not his heart.

M. Bartholdi studied painting in his youth under Ary Scheffer, at Paris. But the bent of his talents lay toward sculpture, and to that branch of art he finally devoted all his attention. His greatest work is the statue of Liberty which overlooks the Harbor of New York. The right hand, bearing a torch was sent to the Centennial Exhibition at Philadelphia in 1876.

On Washington's birthday, February 22, 1877, Congress in flattering terms accepted the statue as the gift of the French nation, and set apart Bedloe's Island as its site. The head of the statue was finished and shown at the Paris International Exposition of 1878. On the Yorktown anniversary, October 24, 1881, the framework was all completed, and Hon. Levi P. Morton, American Minister to France, drove the first rivet in the first piece that was mounted.

More than 300,000 persons visited the workshop while it was being put together. On July 4, 1884, the completed work was formally presented to the

United States. Six months later it was taken down, packed, and in May, 1885, sent to America in the French government's ship "Isere." Meantime, by State appropriation and private subscription, the latter largely promoted by the enterprise of the "New York World," a suitable pedestal had been built on Bedloe's Island. The work of putting the copper plates of which the statue is composed upon the framework was begun on July 12, 1886, and in October the great work was done. The unveiling occurred with imposing ceremonies on October 28, 1886. M. Bartholdi, M. de Lesseps, Admiral Jaurès and many other eminent Frenchmen were in attendance. There were grand parades on land and water, and orations by Senators Evarts and Chauncey Depew.

BELL, ALEXANDER GRAHAM.

He was born in Edinburgh, Scotland, in 1847, and was trained in the calling which had become hereditary in his family, that of teaching the deaf and dumb to communicate with others. He studied at the Edinburgh High School, and then at the University of Edinburgh, pursuing the usual courses of study and, in addition, being specially trained in the orthoepic system of his father and grandfather. At the age of twenty he entered the University of London; but the climate of Great Britain did not agree with his delicate, health, and when his father, three years later, removed to Canada to take a professorship in Queen's College, Kingston, the son gladly accompanied him, and took up his residence in America.

Mr. Bell came from Canada to live in the United States in 1872, having been called to Boston University, to be pro-

fessor of vocal physiology. There he elaborated and perfected the system, which had originated in his family, of causing the dumb to speak and the deaf to hear. He studied every phase of the topic, every department of the science of sound. He examined into the creation of sound by the vocal organs; the transmission of sounds by various mediums; the reception and comprehension of sound by the organs of the ear. And thus, from endeavoring to make deafmutes converse at the distance of an arm's length, he went on to enable men to talk with each other, in their own natural tones of voice, at the distance of many miles.

He first began to study the transmission of sound by electricity in 1870, the year he came from England to Canada. He was then merely trying to make more effective his teaching of deaf-mutes. His idea was to make, if possible, the tonal vibrations of the air visible to the eve. In this he came close to inventing the phonograph, which Mr. Edison thereafter gave to the world. He found that it was possible, by means of a vibrating plate armed with a stylus, to obtain a visible tracing of sounds upon a sheet of paper, or a smoke-blackened pane of glass. process bore a close resemblance to the way the small bones of the ear are acted upon by the tympanum, and he continued his experiments with an actual human ear, prepared for the purpose.

Mr. Bell produced the first speaking telephone, obtaining a patent for it on February 14, 1876. On that very same day a patent was also granted to Gray for a similar device. The important difference between the two was this: Gray's telephone employed a battery,

while Bell's used a magnet only. Meantime another inventor had been at work, independent of these and indeed unconscious of what they were doing. This was Daniel Drawbaugh, a self-taught genius, living in an obscure Pennsylvania village. From 1867 to 1876 he devoted himself to electric research, and invented numerous telephones, some of them, it is said, almost identical with that of Bell.

These rival claimants appealed to the courts for adjudication of their claims, and the verdicts have repeatedly been in favor of Mr. Bell, so that by common consent he is now regarded as the inventor. A company was organized, and telephones were introduced into every city and town, and they are now regarded as an every day necessity of business life. Mr. Bell has, of course, realized un enormous fortune from his invention.

BOOTH, EDWIN.

Edwin Booth was born at Baltimore, Maryland, on November 15, 1833. He was the fourth son of Junius Brutus Booth, himself the foremost actor of his day. The elder Booth was thirtyseven years old when Edwin was born; at the height of his powers and fame. Between the father and this son a special sympathy existed; undemonstrative, but deep and lasting. So while he was vet but a child he was taken from school to accompany his father about the country on his dramatic tours. Edwin's education, therefore, was obtained by fits and starts. It was supplemented by much experience of the world, both of its caresses and its buffetings.

The result was that he grew up thoughtful, observant, rather moody;

strong in judgment, self-reliant, inflexible of will. He was reticent, too, and modest; and received both praise and blame with equanimity. In time, from being his father's pet, he became his comrade, and then at last his guardian and his master, the only one who could advise and influence that inspired but wayward genius.

Early in his career Edwin Booth went, with his father and brother, the latter named for the father, to California, and played at San Francisco and at Sacramento. There each of the three had a benefit performance. First came that of the father, Junius Brutus Booth, in which he played "Richard III.," the sons taking minor parts. Next came the benefit of Junius Brutus Booth, junior, that actor playing "Othello" to his father's "Iago." Last came Edwin's benefit and he played "Jaffier" to his father's "Pierre." It was on that occasion, Edwin being costumed in black, that his father remarked, casually, "Ned, you do look like 'Hamlet.' Why didn't you choose 'Hamlet' for to-night?" To which the young man answered, carelessly, "At my next benefit, I will." This was his first leaning toward the great part of which he has become the world's greatest exponent. and with which his name must be forever intertwined.

At great cost he erected in New York such a theatre as never before had been dreamed of in this country. It was the architectural gem of the city. Its dimensions were vast, its seating capacity enormous. Its visual and acoustic properties were perfect. Upon its stage the greatest plays could be enacted with every possible spectacular accessory. The scenery was gorgeous,

and every mechanical equipment was provided. Here Mr. Booth gathered about him a company of the best actors and actresses in America, and gave representations of the greatest dramas with a perfection of detail and ensemble such as had before been unknown.

The result was that the unappreciative public left his theatre empty and flocked to see the "cheap and nasty?" sensational plays that third-rate "barnstormers" produced at rival houses. Mr. Booth was bankrupt, his own and his friends' fortunes swept away and only debts left to remind him of his glorious ambition. He for years lived with the utmost economy, in order to make good to his creditors and his friends the losses of his theatre. That done, he accumulated a handsome fortune for himself. His fame as an actor was unrivalled. Died in 1893.

CARNEGIE, ANDREW.

Mr. Carnegie was born in Dunfermline, in Scotland, on the 25th of November, 1835. When he was twelve years of age he emigrated to America and settled at Pittsburg with his parents and a younger brother. He was then almost penniless. He afterward accumulated many millions, and wields an influence in the industrial world as great, possibly, as that of any living man. It may be said that Mr. Carnegie was exceptionally equipped for success both mentally and morally; numbering among his mental qualities shrewdness, persistence, a good memory and an intuitive insight into character, and among his moral qualities integrity, gratitude and geniality.

But his phenomenal rise in life must be attributed largely to his following certain clear principles and methods. Some of these he defined in an admirable address to the students of a commercial college at Pittsburg. These are his maxims, summarized:

"Avoid drink; avoid speculation; avoid endorsements. Aim high. For the question, 'What must I do for my employer?' substitute 'What can I do? Begin to save early—'capitalists trust the saving young man.' Concentrate your energy, thought and capital; fight it out on one line." (The lack of concentration he considers the failing of American business men.)

To these injunctions he might well have added another, suggested by his own career: "Never think your education ended."

Mr. Carnegie's benefactions have been enormous, reaching many million dollars. Numerous towns have fully equipped public libraries which have been furnished by his well-known maxim, "No man should die rich."

CLEVELAND, GROVER.

Among men who have had the nerve to meet the demands of rapidly unfolding destiny Grover Cleveland stands conspicuous. He was born at the modest village of Caldwell, Essex county, N. J., March 18, 1837. His father, Richard F. Cleveland, was the village pastor of the Presbyterian Church. His mother was Anna Neal, the daughter of a bookseller and publisher of Baltimore, Md. In 1841 the Caldwell pastor moved to Fayetteville, Onondaga county, N. Y., and thence, after nine years, to Clinton, in Oneida county, and in 1853 to Holland Patent, near Utica, where he died after a settlement of but three weeks, leaving a widow and nine chil-

dren, of whom Grover was the third. This noble mother lived to rear all her children and passed from earth in April, 1882.

Having been admitted to the bar in 1859, Mr. Cleveland made rapid advances, and in January, 1863, he was appointed Assistant District Attorney for the county of Erie, and in 1870 was elected Sheriff. On the expiration of his term in this office he resumed his legal practice and was pushed rapidly to the forefront in local politics, and was also an active worker in the leading literary and historical efforts of the community. In 1881 he was elected to the Mayoralty of Buffalo by a solid majority, and took office January 1, 1882.

He was subsequently elected Governor of New York by the Democratic party, and was nominated for the Presidency of the United States and elected in 1882. Having served his party well he was re-elected President in 1892, retiring from public life at the expiration of his term. Mr. Cleveland was an advocate of a low tariff, a conservative leader, a wise counsellor and conscientious executive.

DEWEY, ADMIRAL GEORGE.

George Dewey was born in Montpelier, Vt., on Christmas night, 1837. He came from the finest Colonial stock of New England, and from as good fighting stock as ever distinguished itself. It was such stock that constituted the Green Mountain boys and gave sturdy battle at Bunker Hill.

His ancestor, Thomas Dewey, was among that small band of Pilgrims which landed in Massachusetts Bay in 1630. Old Vermonters tell the legend of another of his ancestors, named the

Rev. Jedediah Dewey, who began to preach the Gospel of Christ on that Sunday morning when the Battle of Bennington was fought. At the outbreak of war the Rev. Jedediah laid down the Bible, asked the congregation to follow him, shouldered his musket and marched to the firing line. When he had helped vanquish the English, he went back to church, opened the Bible, took up the fifthly part of his orthodox sermon and went on as if a victorious affray was an everyday affair.

It is a striking coincidence that another Dewey should sail over to a great fleet on another Sunday morning, vanquish this fleet, then draw back his ships and have breakfast served. Dewey's great victory at Manila was won on May 1st, 1898. The grand qualities he there displayed as a naval commander have made his fame world-wide, and placed him in the galaxy of naval heroes that includes Rodney, Nelson, Paul Jones and Farragut.

It is related that when the people of Montpelier after the battle of Manila were celebrating the proud achievements of their fellow-townsman, an incident occurred which showed the estimate of at least one of the old residents of the place, a sort of droll character with a strong infusion of Yankee shrewdness. While the crowd was lining the street this man was seen making his way toward the old school-house, carrying a long board which was carefully wrapped so that no one could see it.

Arriving at the school-house the man took off the covering and proceeded to nail the board up over the door. When people read it they found this lettering: "Here is where his ideas were taught to shoot." A profound truth is conveyed in this statement. The old New England school-house has been the nursery of some of our country's greatest men. There they studied, played pranks in their boyhood, and perhaps were soundly whipped, but it is well to recall the saying inscribed on the Connecticut house built at the World's Fair: "The finest products of Connecticut are her men and women."

It may be said with truth that in Dewey's case as well as in nearly all others, the boy was the father of the man. His career is worthy of the great American historian of the future. Almost at the close of his active life this soldier of the sea was told to "destroy the Spanish fleet." He did destroy it. He let no ship escape. He lost not a man in his fleet. He proved himself a statesman in the subsequent handling of affairs at Manila. He showed himself master over any situation. Well has he won his proud title of admiral of the navy, better still has he won the gratitude of a great people, and best of all has he won for himself a name written large and glorious in the naval history of the world.

A magnificent reception, unsurpassed in our country's history, awaited him on his return from the scene of his victory, millions of his countrymen vying with one another to do him honor. Early in 1900 Admiral Dewey announced himself a candidate for nomination to the Presidency.

On the second anniversary of the Admiral's victory at Manila a great welcome was tendered him by Chicago and many other cities and towns in the west and south-west. Multitudes greeted him with enthusiasm.

EDISON, THOMAS A.

No name in the realm of scientific discovery is more distinguished than that of Edison, more especially in that part of it which relates to electricity. We find him at the age of ten reading the histories of Gibbon and Hume, yet his biographers assert that he went to school only two months in his boyhood. Like the vast majority of those men who have left a deep impression upon their time, he was born in poverty and obscurity, being conspicuously a selfmade man. His education was under the direction of his mother, yet at best was but superficial.

Mr. Edison was born at Alva, Ohio, February 11, 1847. As soon as he was old enough to become interested in any study, he showed great fondness for chemistry. This indicated the bent of his mind, and was a prophecy that the natural sciences would be his favorite pursuit. While he was employed as a newsboy on a railway train, he determined to learn telegraphy. Here was the beginning of that remarkable career, and of those discoveries which, if they have not revolutionized the telegraph system, have certainly promoted its efficiency and perfected its instruments. While residing at Adrian, Mich., he opened a shop for repairing telegraph instruments and making new machinery.

Mr. Edison's history is more than usually rich in incidents of an interesting character. When he was selling papers and candies on the trains of the Grand Trunk Railway, he was making a hobby of chemistry. At this time he was a mere boy. Not having any other facilities for experimenting, he constructed an amateur laboratory in one

corner of a baggage-car. When other boys would have been at play, he was amusing and instructing himself in that corner. During his absence one day a bottle of phosphorus, by being upset, or in some way broken, set the car on fire. Grave doubts were entertained as to the propriety of having so dangerous a lad on board the train, and the baggagemaster kicked his chemicals and apparatus out of the car, which did not, however, put an end to the boy's passion for chemistry. He improvised another laboratory in a different place, and continued his studies as before.

Naturally a mind so alert was constantly seeking out new inventions. He never saw an instrument without immediately asking himself whether it could not in some way be perfected.

The idea of the telephone had long been in existence. It was first practically applied in the construction of toys. One called the "Lover's String" was made in 1831, and is the simplest form of a telephone. The discoveries and improvements of Mr. Edison have aided greatly in perfecting this instrument. The transmitter, constructed and improved by him and Blake, is combined with the Bell telephone and makes the telephone of general use. To such a state of perfection has the instrument been brought that over long distances, even between some of our great cities, communication can be successfully carried on.

It is not too much to say that Mr. Edison's ideas have entered largely into all the electrical discoveries of recent time. His inventions consist of improvements in the electric light and the telephone. He is also the inventor of the phonograph, the quadruplex and

sextuplex transmitter, the microphone, the magaphone, the kinetescope, the mimeograph, the electric light, the electric pen, etc.

FIELD, MARSHALL.

Marshall Field was born in Conway, Mass., in 1835. His father was a farmer, and that, too, in a locality where it is no easy matter to make two blades of grass grow where one grew before. It was not needful that the father should make fortunes and successes for the son; the son had fortunes and successes in himself. He went to Chicago in 1856 and obtained employment in the wholesale dry goods house of Cooley, Wadsworth & Co., afterwards Cooley, Farwell & Co., and subsequently the John V. Farwell Company.

In 1860 he obtained an interest in the concern, but in 1865 Mr. Field and L. Z. Leiter withdrew from the house, and in connection with Potter Palmer organized the firm of Field, Palmer and Leiter. Mr. Palmer withdrew in 1867, and the firm became Field, Leiter & Co. Since the retirement of Mr. Leiter, in 1881, the house has been known by the name of Marshall Field & Co.

To say that its business has been extended, not only throughout America, but into other parts of the world, until it is, perhaps, the most extensive of its kind of which we have any record, speaks volumes for the tact and enterprise, sound judgment and persevering energy of those who have had the management of it. While Mr. Field has been associated with men of ability and not capable of making many mistakes, his guiding thought and practical business talent have been displayed throughout.

FULLER, MELVILLE W.

The Chief Justice of the United States Supreme Court during the closing years of the century was Melville W. Fuller. He was born in Augusta, Maine, February 11, 1833, and twenty years later graduated from Bowdoin College, an institution which has been peculiarly favored in its distinguished graduates. Having studied law at Harvard College, Mr. Fuller entered upon the practice of his profession in his native city in 1855.

In 1856 he was elected City Attorney. But, like many young men born and reared in New England, he was seized with the Western fever, and determined to go West to find a wider field for his energies. He removed to Chicago, where, for thirty-two years, he conducted a highly successful law practice, having gained immediately a wide reputation for legal acumen, and for honorable methods in the management of his cases.

When President Cleveland selected him to fill the vacancy on the Supreme Bench of the United States caused by the death of Chief Justice Waite, the choice was pronounced a wise one by those who knew Mr. Fuller best. Those who had not known him were somewhat surprised at his selection, but subsequent events have justified the wisdom of the choice. He was confirmed by the Senate July 20, 1888, and took the oath of office on the 8th of October following.

GRANT, ULYSSES S.

General Grant, the eighteenth President of the United States, was inaugurated at Washington with imposing ceremonies, on the 4th of March, 1869. He was born at Mount Pleasant, Ohio,

on the 27th of April, 1822. His father was a tanner, and wished him to follow his trade, but the boy had more ambitious hopes, and, at the age of seventeen, a friend secured for him an appointment as a cadet at West Point, where he was educated. Upon graduating, he entered the army. Two years later he was sent to Mexico, and served through the war with that country with distinction. He was specially noticed by his commanders, and was promoted for gallant conduct.

Soon after the close of the war, he resigned his commission, and remained in civil life and obscurity until the breaking out of the Civil War, when he volunteered his services, and was commissioned by Governor Yates, colonel of the Twenty-first Illinois regiment. He was soon made a brigadiergeneral, and fought his first battle at Belmont. In February, 1862, he captured Fort Henry, and ten days later Fort Donelson, with more than 14,000 prisoners, for which victories he was made Major-General of Volunteers. In the following April he fought a two days' battle at Shiloh, amongst the severest of the war, in which General A. S. Johnston, commanding the Confederate Army, was killed.

Grant's next exploit was the capture of Vicksburg after a long and stubborn siege. The surrender of the stronghold included 31,600 prisoners and 172 cannon. Rapidly he rose to be commander-in-chief of the Federal army, defeated General Lee in the bloody battles of the Wilderness, and received Lee's surrender, involving the downfall of the Confederacy, in April, 1865. In 1866 Grant was advanced to the grade of full General, and in May, 1868, he was nomi-

nated for the Presidency by the Republican convention, and in the following November was elected.

He was again elected to the Presidency in November, 1872, and proved a wise and successful executive. He died at Mount McGregor, near Saratoga, N. Y., July 23, 1885.

IRVING, HENRY.

John Henry Brodrib Irving, best known as Henry Irving, was born at Keinton, near Glastonbury, Somersetshire, England, on February 6, 1838, the only son of his parents. At twelve years old he was entered at the school of Dr. Pinches in Georgeyard, Lombard street, London, and at that early age quickly won a reputation for skill in dramaticrecitations. His first theatrical part was that of "The Uncle," a role in which in after years he has been frequently and greatly admired. The early performance was enacted upon the platform of Dr. Pinches' school. At fourteen years old he was entered in the office of an East India merchant, and was destined for commercial life.

Against this, however, his inclinations rebelled. At odd moments he studied dramatic art with an actor named Hoskins, who introduced him to Mr. Phelps, a theatrical manager, who offered him an engagement in a minor part at Sadler's Wells. This, however, young Irving declined. His first appearance accordingly was made in 1856 at a theatre at Sunderland, by happy coincidence called the Lyceum.

His famous career at the Lyceum Theatre, London, probably the most successful in the annals of the modern stage, began in 1871. At first prospects were not bright. The house had

an ill name; it had for years been unsuccessful, a sort of managerial graveyard. Mr. Irving's first play, "Fanchette," was a poor one and met with deserved failure, but his next one atoned for it. It was Mr. Albery's adaptation of "Pickwick." Mr. Irving's impersonation of "Alfred Jingle" was irresistibly funny, and the public crowded the house nightly. In November of that year "The Bells" was produced, and Mr. Irving scored a great hit in the part of "Matthias," which in the years following he immortalized. The town was literally taken by storm. "He did not," says a well-known writer, "wake the next morning and find himself famous; he knew it before he went to bed."

JACKSON, THOMAS J. (STONEWALL).

Thomas Jonathan, better known the world over as Stonewall Jackson, an American general, was born in Lewis Co., Va., 1824, and graduated at West Point Academy, 1846. After serving with distinction in the Mexican War, he became a professor in the Military Institute at Lexington, Va., until the outbreak of the Civil War. A brigadier-general in the Confederate service at the battle of Bull Run, July 21, 1861, his command on that occasion "stood like a stone wall," to use the words of a distinguished general present.

In September he received the rank of major-general; defeated Gen. Banks at Strasburg, May 23, 1862; fought an indecisive battle with Fremont at Cross Keys, June 8; commanded a corps in the battles of Gaines' Mill, June 27, and Malvern Hill, July 1; again defeated Gen. Banks at Cedar Mountain, Aug. 9; captured Harper's Ferry with 11,000

Federal prisoners, Sept. 15; commanded a corps at Antietam, Sept. 17; and was made lieutenant-general for his services in largely contributing to the National defeat at Fredericksburg, Dec. 13, 1862. On the 2d May, 1863, by a clever flank movement, he defeated the 11th corps of Gen. Hooker's army at Chancellors-ville; and on the evening of the same day was fired at by a patrol party of his own men, who mistook him and his staff, in the darkness, for a detachment of Union cavalry. He died of his wounds on the 10th.

JEFFERSON, JOSEPH.

One of the most renowned comedians of the century, born in Philadelphia in 1829. He came of a theatrical stock, his great-grandfather having been a member of Garrick's company at Drury Lane, while his father and grandfather were well known American actors. With such an ancestry it is not wonderful that young Jefferson was on the stage from his very infancy, appearing as Cora's child in "Pizarro" when only three years of age, and dancing as a miniature "Jim Crow" when only four. For many years he went through the hard training of a strolling actor and then played in New York, where in 1857, he made a hit as Dr. Pangloss, and in 1858 created the part of Asa Trenchard in "Our American Cousin," Sothern playing Lord Dundreary.

In 1865 he visited London and at the Adelphi Theatre played for the first time his world-famous part of Rip Van Winkle. With this character his name is identified, and, although he has shown himself an admirable comedian in many characters, to the English-speaking world he is always Rip Van Winkle,

...hich in his hands is a character beautiful in conception, subtle and delicate in execution. And the art is all the actor's; the dramatist has done nothing; it requires a Jefferson to present Rip Van Winkle.

LEE, ROBERT E.

Robert Edmund Lee, commander-inchief of the Confederate forces in the field during the American Civil War, and son of Gen. Henry Lee, was born in 1808. He graduated from West Point in 1829, and in 1846 received the chief command of the American engineer corps engaged in the war against Mexico. Throughout the campaign that followed, Lee distinguished himself so highly that he gained promotion to the rank of colonel, and was on several occasions highly commended in General Taylor's despatches. From 1852 till 1855, he filled the position of Superintendent of West Point Academy—a post he resigned on his being appointed lieutenant-colonel of cavalry.

In 1861, on the breaking out of the Civil War, Colonel Lee resigned his commission in the National service, and placed his sword at the command of his native State. So high was his reputation that he was at once appointed to the chief command of the Virginian levies, with the rank of general in the Confederate army. His career thenceforward epitomized the successes and reverses of the sanguinary struggle that ensued.

In May, 1862, he succeeded Gen. J. E. Johnston in the command in chief of the army, and conducted the memorable campaigns which, during a period of four years, and, in fact, till the close of the war, resulted in the repulse of

Gens. McClellan, Pope, Hooker, and Burnside. In 1865, he was appointed generalissimo, and, after displaying throughout his ardnous command both consummate ability as a general, and most éstimable qualities as a man, he was at length compelled to succumb to his tenacious adversary, Gen. Grant, April 9, 1865, on which day, at Appomattox Court-House, he surrendered himself and what was left of his army prisoners of war. After frankly accepting the inexorable logic of events, his career thenceforward was one preeminently in accordance with his superior qualities both of mind and heart. Died in October, 1870.

MARCONI, M. GUIGLIELMO.

Since the perfection of the telegraph and telephone for commercial purposes, and the laving of cables across the ocean for the transmission of messages, electrical experts have been studying the problem of transmission of electrical energy for messages without wires. Gray devised a method of sending signals along light waves, and others tried transmitting telegrams to moving trains by means of the rails. These methods, however, were not successful in the main, and it was left for M. Guiglielmo Marconi, a native of Florence, Italy, yet in his twenties, to discover that Hertzian waves could be generated from electricity and sent across space without the means of intervening wires.

In 1895, while yet quite young, Marconi was experimenting across his father's fields in Bologna, Italy, and by the use of tin boxes, called "capacities," set upon poles of varying height, and connected to separate instruments by insulated wires, he sent and received by

a crude transmitter and receiver electrical signals without the aid of intervening wires. He soon learned that certain distances could be covered only by having the poles for his boxes of certain height, and the height of the poles had to be increased with the distance. He experimented with the aid of several other scientists for some time, and then the world was startled early in 1899 by the news that messages had been sent by this wireless method across the English Channel from Dover to Boulogne.

MELBA, MADAME NELLIE.

Of all the talented and charming prima donna who delight the eyes and ears of the American public, Madame Melba is, without doubt, the leading favorite. This brilliant singer, who is gifted with a voice of wonderful sweetness and sympathy of tone, was born in Melbourne, Australia, from which town she takes the name of Melba, her father having been a well-known organist, whose greatest pleasure was to teach his little daughter music.

Madame Melba sang in concerts and opera in many of the large towns of Europe, but her first great success in a really great role, was at the Grand Opera House in Paris, where she appeared in Gounod's Romeo and Juliet on November 4, 1889; her Juliet on that occasion being pronounced a complete and perfect success, and gaining for her many admirers. She has sung many great roles since then, amongst others, Lucia, Marguerite, etc., but it is as Juliet that she is always at her best; and it is with the ever popular opera of Romeo and Juliet that we always associate her name.

PATTI, ADELINA.

Adelina Patti was born at Madrid, April 9, 1843. In early youth she came to America with her parents and studied music with her brother-in-law, Maurice Strakosch. She first appeared in New York, November 24, 1859, and her voice at once attracted attention. she appeared in London in "La Somnambula." She took the town by storm and became the prime favorite of the day. Since then she has maintained her rank as the most popular operatic star living. Not only is she an unexampled vocalist, but her acting is such as would place her in the first rank, were she not gifted with song.

WANAMAKER, JOHN.

He was born in Philadelphia, July 1., 1838; attended a country school until he was fourteen, and there obtained about the only education he ever received. His first place was that of messenger boy with the publishing house of Troutman & Hayes, at the exceedingly modest salary of \$1.25 a week.

Having entered mercantile life when a young man, he rose step by step until he became the leading merchant-prince of America and proprietor of the largest store in the country. He is a man of sterling integrity and marvellous executive ability.

Having many times declined public office, in 1889 he accepted the portfolio of Postmaster-General in President Harrison's Cabinet, and introduced into the department the most approved business methods. During his wise and efficient administration he did much toward perfecting and extending the postal service.

APPENDIX A

CONTAINING A

FULL ACCOUNT OF THE LATEST EVENTS IN THE HISTORY OF THE NINETEENTH CENTURY.

ONTINUING the account of the war between the British and the Boers contained in preceding pages of this volume the reader will observe that the war began on October 11th, 1899. On that day the Boer Government sent their historic ulti-Two days later the British agent left Pretoria, the capital of the Transvaal. Natal and Cape Colony were invaded, and Laing's Nek was occupied; Mafeking and Kimberly were invested by the Boers, and an armored train with two guns was captured near Mafeking within the next two days. A combined movement was directed against the British force of 4,000 men under General Symous at Glencoe. Commandant Lucas Meyer made the attack on the 29th. General Symons, the British commander, carried the hill on which the Boers had established themselves, captured their guns and drove them off, but he was himself mortally wounded and died a day or two afterwards.

A detachment of Hussars was captured while pursuing the retreating foe. Meanwhile, the Boers had seized the railway between Glencoe and Ladysmith, and were only dislodged after a stubborn fight at Elandslaagte on the 21st. On this occasion Commandant Viljoen was killed and two guns were taken by the

British. The attempt to isolate the British force at Glencoe thus failed, but, as another attack was threatened, the British force was compelled to retire and join the main body at Ladysmith, leaving the wounded at Dundee.

To cover his retreat, General Sir George White had to fight again, at Reitfontein, on the 24th, and again the Boers were dislodged. The loss on both sides on this occasion was heavy. A little later Colonel Baden-Powell inflicted some loss on Cronje's command in a brilliant sortie and bayonet charge at Mafeking. Meanwhile Ladysmith was gradually being invested by General Joubert, and the British suffered great loss on October 30th. On that day about one thousand men, consisting of the Royal Irish Fusiliers, and the Gloucestershire Regiment, with No. 10 Mountain Battery, were surrounded at Nicholson's Nek and forced to capitulate.

They were overcome after they had lost their ammunition through a stampede of the mule train. The British troops at Colenso were on November 2d forced to retire over the Tugela bridge, and all communication between Ladysmith and the south was cut off. Also the bridges over the Orange River into Cape Colony were seized. Aliwal North, Jamestown and Colesburg were occupied

609

on the 18th, and a considerable number of the Cape Colonists joined the Boers. The British then began an advance from the south, and Lord Methuen, commanding at Orange River, pushed on, in an effort to relieve Kimberley, to Belmont, and on November 23d defeated a strong Boer force. Sixty-four wagons were taken and 50,000 rounds of ammunition, with 750 shells, were blown up. The British dealt another severe blow to the Boers at Enslin on the 25th, when the Boers fought under cover of a white flag.

A Hard Fight.

The position of Kimberley had much influence on the progress of the war. Cecil Rhodes went to the town on October 12th, and pronounced it "as safe as Piccadilly." The force under Lord Methuen, five days after defeating the enemy at Belmont, effected the passage of the Modder River in the face of eight thousand Boers in "one of the hardest and most trying fights in the annals of the British army."

The arrival of Sir Redvers Buller at Durham marked a new stage in the Ladysmith campaign. The Boers, after investing that place, had continued to spread south and toward the Tugela. Before the appearance of the British reinforcements, they occupied Colenso, as well as Beacon Hill and the Mooi river. Among the prominent incidents of the British advance were a night attack on the Boers at Willow Grange and the armored train engagement at Chieveley, on November 15th, when Winston Churchill especially distinguished himself. General Hildyard made an attack from Estcourt on Beacon Hill, and General Joubert had to withdraw in the direction of Colenso and Ladysmith. On the last day of November Ladysmith was effectively shelled by the Boers from Lombard's Kop.

On December 8th the British stormed Lombard's Kop and captured a Boer gun. Two days later, General Gatacre attempted to surprise the Boer position at Stormberg, in Natal. The attempt resulted disastrously, his forces being raked by the Boers' rifle and artillery fire, without a possibility of replying. While the Boer loss in this engagement was slight, the British lost 687 officers and men.

Met with Heavy Losses.

On the 11th General Methuen, in attempting to relieve Kimberley, attacked the Boer position at Magersfontein, north of the Modder. The British were forced to retire with heavy losses, General Wauchope and the Marquis of Worcester being killed. Two days later the Boers, who were advancing south in Cape Colony towards Naauwport, were driven back by General French, with a loss of forty. On the 15th the British sustained another serious reverse.

General Buller, in attempting to force a passage of the Tugela river at Colenso, was repulsed, with a loss of 1,097 officers and men and eleven guns. Three days later the British War Office announced that Lord Roberts would be sent to command in South Africa, with Lord Kitchener as chief of staff, and that 100,000 men would be sent to the front.

For nearly the whole of the following month the hostilities consisted chiefly in an occasional sortie and in more or less harmless artillery warfare. But on January 6th the Boers made a desperate attempt to take Ladysmith. As early as 2.30 A. M. they attacked two strong

positions of the British at Cæsar's Camp and Wagon Hill. The battle was fiercely fought on both sides, and the positions mentioned were captured and recaptured three times, the British at the end holding their own and inflicting tremendous loss on the Boers.

The attack continued until 7.30 P. M., and at dark the Boers were driven out at the point of the bayonet. The British losses were 450 officers and men, and those of the Boers were thought to have been very much heavier. On the same day General French reported a "serious accident" at Colesberg; a company of the Suffolk Regiment, with seven officers, was captured, and more than a score of officers and men were killed. On this day also Generals Roberts and Kitchener reached Cape Town.

Help for Ladysmith.

On January 12th the British army, under General Warren and Lord Dundonald, prepared for a general advance from Colenso to the relief of Ladysmith. They crossed the Tugela at Potgieter's and Trichardt's drifts, and Lord Dundonald's mounted troops engaged in a successful action with the Boers near Acton Homes. On January 20th General Clery, with a part of General Warren's force, fought for thirteen hours, driving the Boers from hill to hill for three miles. Next day he pursued them two miles further. On the 21st the Boers resumed the bombardment of Ladysmith.

On January 23d General Buller announced the capture of Spion Kop, the key of the Boer position on the Upper Tugela; but two days later the news was sent that he was obliged to give up that position. On February 27th it was

learned that a supply train had reached General White during this engagement. The losses at Spion Kop in the attempt to relieve Ladysmith were 1,985, and the total loss of the British to that date was nearly 10,000. Rumor placed the Boer losses at Spion Kop at 1,700.

Meanwhile the bombardment of Kimberley was continued, and it was reported, though without foundation in fact, that Colonel Plumer had relieved Colonel Baden-Powell on January 23d. The great failure of General Buller's second attempt to relieve Ladysmith was followed by a withdrawal south of the Tugela on January 27th.

Important Movements.

Three days later General Buller, the undaunted, told his troops that he hoped to be in Ladysmith in a week, and on February 5th he again crossed the Tugela in a third attempt to relieve the beleagured forces of General White. By the 9th he had recrossed to the south of the Tugela, being unable to make headway against the strong Boer position at Vaal Krantz.

With the operations leading up to the relief of Kimberley the whole course of the war seemed to change. The fact that Lord Roberts and Lord Kitchener had arrived and had gone, early in February, to the British headquarters south of the Modder River, seemed a good omen. From this point a movement for the invasion of the Orange Free State. led by Lord Roberts, began on February 11th. An expedition under General Macdonald to Koodoesberg, fifteen miles to the westward, as been made to divert the Boers in that direction.

On the 12th a force of cavalry, led by General French, who had made a brilliant march from Colesberg to join Methuen's forces, made a dash across the Riet river, forced a passage on the Modder river the following day, and on the 15th entered Kimberley, where he was met by Colonel Kekewich, who had forced his way out of the city. The Boer troops under General Cronje abandoned their trenches at Magersfontein and retreated eastward towards Bloemfontein. The same day Lord Roberts occupied Jacobsdal an important base of supplies for the Boers, southeast of Kimberley. To that place he transferred his headquarters. By this time General Cronie was in retreat towards Bloemfontein, pursued by General Kelly-Kenny.

Cronje's Last Stand.

On February 19th, the railway to Kimberley was open; by this time Lord Roberts' force had moved up to Paardeberg Drift, in the bed of the Modder river, where Cronje made his last stand and was surrounded by the British. After his request for an armistice had been refused, reinforcements under General Botha had been driven off and all other assistance from the outside proved unavailing, General Cronje, with 4,660 troops surrendered to Lord Roberts on February 27th.

Meanwhile, on February 14th, General Buller began his fourth advance to the relief of Ladysmith. Four days later he executed a flank movement and drove the Boers across the Tugela and occupied Hlwangwane Hill. On the 20th General Hart occupied Colenso, and all the south side of the Tugela was held by General Buller. The next day General Warren crossed the river at Colenso, after slight resistance. It appears that, although much of Buller's

progress to Ladysmith was stubbornly resisted, it was by a diminishing number of Boers, since many of them were being withdrawn to assist Cronje on the Modder river.

On February 23d the Boers gave the town its final bombardment, for after a sharp engagement at Pieter's Station, on the 24th, the rest of the march northward was almost unopposed. On the 28th Lord Dundonald entered Ladysmith, and on March 1st, General Buller visited the city; the Boers raised the siege and hurriedly withdrew to the northward, leaving a vast amount of ammunition and supplies. During the final ten days of the Ladysmith campaign, General Buller's losses were about twenty-four hundred, and the entire cost of the Ladysmith relief from the beginning was about fifty-five hundred men.

British Successes.

While these stirring scenes were being enacted on the Modder river and at Ladysmith, the British arms were also successful in other parts of South Africa. On February 16th General Brabant's horse force drove the Boers from a strong position at Dordrecht, in Cape Colony, after eight hours of hard fighting. Boer attacks on Mafeking on February 17th and 18th were repulsed with considerable loss to the attacking party. On February 25th General Gatacre's scouts suffered a severe reverse at the hands of the Boers near Stormberg. On February 28th it was reported that General Cronje and his soldiers were on their way to Cape Town as prisoners of war. The same day General Clements entered Colesberg, where he met with an enthusiastic reception.

March opened with rejoicing throughout the British Empire, and especially in London, over the relief of Ladysmith, for now it seemed evident that the war was drawing to a close. For such a hope there seemed good reasons, since the Boers were everywhere retreating, Ladysmith being free of them, General Brabant having dislodged them from Dordrecht and a little later put them to rout, and General Gatacre having entered Stormberg without opposition. Meanwhile Lord Roberts was pursuing the Boers towards Bloemfontein. On March 7th, at Osfontein, he turned their flank on the Modder river and put Generals Dewet and Delarey to rout.

White Flag Dishonored.

Every day the British approached nearer to the Free State capital, their way being stubbornly opposed by the Boers. The latter again resorted to their former tactics of firing on the British under cover of a white flag and using explosive bullets. On March 12th General French, the Kimberley hero, again distinguished himself by his capture of hills commanding Bloemfontein. The next day Lord Roberts and the British troops occupied the Orange Free State capitol, which was formally surrendered to him.

On the 13th a letter from Presidents Kruger and Steyn, relating to possible terms of peace, and Lord Salisbury's reply, rejecting the proposition for the independence of the two republics, were read in the House of Commons. The offer of the United States to assist in bringing about peace was also declined by the British Government.

The entry of Lord Roberts into Bloemfontein, followed as it was by the occu-

pation of Bishof, produced a speedy result of the highest importance. On the 17th large numbers of Free State burghers surrendered, opened their shops, and went back to their farms, accepting British rule. Meanwhile the efforts to relieve Baden-Powel at Mafeking were redoubled. A column which included the Kimberley Light Horse had started from the south, and Colonel Plumer advanced from the north as far as Lobatsi. where he was repulsed on the 15th and again, near Mafeking, on the 31st. Having received the submission of the Free Staters and established a stable condition of affairs, Lord Roberts prepared to move on towards Pretoria.

March closed with the death of General Joubert on the 27th and the capture on the 31st at Korn Spruit of 400 men, including the 10th Hussars and seven pieces of artillery.

A Fresh Disaster.

April opened with a disaster – that of Reddersburg, where on the 4th 500 men, including three companies of Irish Rifles and two of the 9th Mounted Infantry, were captured by the Boers The next day, at Boshof, the British captured a small company of Boers, and Colonel de Villebois-Mareuil, the French military expert, who had been General Joubert's chief of staff.

On April 9th the British garrison at Wepener was isolated, and the siege against Colonel Dalgetty and his men began. On the next day they also attacked General Buller at Elandslaagte, in Natal. On the 11th General Gatacre's recall to England was announced, and a week later the British War Office made public a report from Lord Roberts, in which he severely criticised Generals

Warren and Buller and Major Thorny-croft in connection with the battle of Spion Kop.

A little later General Warren was appointed Military Governor of Griqualand West. On April 22d Lord Roberts dispatched General Pole-Carew to the assistance of General Rundle, who was hard pressed by the Boers at Wepener. But Generals Hart and Brabant, who had arrived before him, found the investment abandoned and the Boers in full flight. Attempts to head them off as they retired were unavailing.

Lord Roberts' Advance.

On April 30th the long-expected advance of Lord Roberts' force from Bloemfontein began. Brandfort was occupied on May 3d, and two days later the Vet River was reached, when after a sharp battle, General Hutton's mounted infantry turned the Boers' flank. The Boer army fell back, and Lord Roberts captured a quantity of stores at Smaldell. Winburg was also occupied by General Ian Hamilton. On May 12th General Roberts, at the head of the British army, entered Kroonstad, the temporary capital of the Free State, without opposition.

Hundreds of Free Staters were reported as being anxious to surrender. Meanwhile, General Buller began his advance from Ladysmith, capturing Dundee, Glencoe and Newcastle, the Boers evacuating their positions on the Biggarsberg. On May 17th, Lindley, the latter temporary capital of the Free State, was occupied. Lord Roberts also announced the capture of three Boer Generals.

But the piece of news that produced the greatest enthusiasm on the part of

the sympathizers with the British cause was that of the relief of Mafeking on May 18th. Colonel B. T. Mahon, with his troops from the south, joined forces with Colonel Plumer on the 15th, and after hard fighting for several days, entered Mafeking unopposed. Colonel Baden-Powell, the gallant defender, was at once promoted from the rank of Lieutenant-Colonel to that of Major-General.

Retreat of Boers.

On the approach of Lord Roberts' army the Boers abandoned their strongly. fortified positions on the Rhenoster river and retired across the Vaal river. partly destroying the railway bridge at Vereeniging as they crossed. On the Queen's birthday, May 24th, and the day following, the left wing crossed the Vaal at Parys, west of the railway bridge. On May 27th the main body of the British army crossed the river unopposed, near Vereeniging, and camped on the north bank. Roberts' army marched twenty miles on May 28th, reaching Klip River Station, within eighteen miles of Johnannesburg. On the following night the city was captured by the British without serious opposition. Pretoria, the capital of the Transvaal, fell before Lord Roberts' advance, and the last blow was struck in the conquest of the South African Republics.

Yet desultory fighting continued around Pretoria, the Boers retreating, then turning upon their enemy and continuing their struggle to save the independence of their country. In these bloody engagements the British, for the most part, had the advantage and the hopeless nature of the conflict became,

so far as the Boers were concerned, more apparent every day.

There were many sympathizers with the British troops at Pretoria. Lord Roberts entered the town amidst the acclamations of a throng of people, who appeared to rejoice at the near prospect of an end of the struggle and the dawn of peace.

A Conspiracy.

Lord Roberts reported to the War Office from Pretoria on August 10th that a plot to carry him off had been discovered. The conspirator against whom the principal indictment was laid was Lieutenant Cordua, an officer of the Staats artillery of the South African Republic. On giving his parole he was allowed to go at liberty in Pretoria. With the other conspirators he was placed on trial. The prisoners at first pleaded guilty, but were advised by their counsel to withdraw the plea and to take their trial. From the evidence it appeared that Cordua, a number of foreigners formerly in the Boer service and some Boers formed a plan by which the headquarters of Lord Roberts were to be surrounded while the attention of the troops was diverted by the noise of firing in another part of Pretoria. sistance was to be overcome by force and the commander-in-chief carried off, if possible.

Lieutenant Cordua and another of the conspirators started off to communicate personally with General Botha. When all the arrangements were nearly complete, information was brought to the British headquarters' staff, one of the conspirators having divulged the secret to his sweetheart. The court, on August 22d, after forty-five minutes' delib-

eration, found Lieutenant Cordua guilty on the charge of breaking his parole and entering into a conspiracy to kidnap Lord Roberts. Sentence was deferred until the finding of the court was confirmed by the commander-in-chief, the judge having announced that the penalty of the crime would be death.

Lieutenant Cordua was shot on the afternoon of August 24th, Lord Roberts having confirmed the sentence of death imposed upon the lieutenant on conviction of being a ringleader in the plot to abduct him and kill British officers.

Under date of September I, Lord Roberts reported: "I have to-day issued under Her Majesty's warrant of July 4, proclamations announcing that the Transvaal will henceforth form a part of Her Majesty's dominions."

The Transvaal Annexed.

The annexation of the Transvaal meant in the eyes of the British Government and authorities that the country was now an integral part of the British dominions, and all the inhabitants British subjects. The British law lays down that any one taken in arms against the Queen, representing the constituted authority, is a rebel and traitor, and liable to the maximum penalty of death. Onder military law he may be court-martialed and shot instantly.

Whether Lord Roberts meant to adopt this course was doubtful. But the proclamation was a precautionary measure to make his legal position secure should he decide it necessary to treat the Boers as rebels at a moment's notice.

to his sweetheart. The court, on August 22d, after forty-five minutes' delib- Transvaal was the sudden disappearance

of President Kruger. The following despatch was received at the War Office in London from Lord Roberts, September 13th:

"Kruger has fled to Lorenzo Marques, and Botha has been obliged to give over the command of the Boer army, temporarily, to Vilejon, on account of ill health. In consequence of this I have circulated a proclamation as follows:

"'The late President Kruger, with relics and archives of the South African Republic, has crossed the Portuguese frontier and arrived at Lorenzo Marques, with the view of sailing for Europe at an early date; Kruger has formally resigned the position which he held as president of the South African Republic, thus severing his official connection with the Transvaal. Kruger's actions show how hopeless, in his opinion, is the war which has now been carried on for nearly a year, and his desertion of the Boer cause should make clear to his fellow burghers that it is useless to continue the struggle any longer.'"

Ex-President Kruger was offered an asylum in Holland.

MASSACRES OF FOREIGNERS BY THE CHINESE.

ARLY in 1900 the attention of our own country and of European nations was turned toward China, and reports of the massacre of the native Christians of China, and of the foreign residents, were received with a thrill of horror. It was known that the bloodthirsty actors in this shocking tragedy were Boxers, the appalling details of which were scarcely believed until evidence was forthcoming that could not be questioned.

As to what the Boxer is, competent testimony comes from various sources. Edwin Wildman, late vie-consul of the United States at Hong Kong, says:

"They are divided into lodges, and have common signs and pass-words known only to themselves. They have certain methods of interrogating each other and recognize peculiar manners in placing cups and dishes at the table; of wearing their garments and saluting each other. They hold their meetings usually in secluded places in the dead of the night and draw blood from their

bodies, mixing it with water and pledging each other to oaths of vengeauce against their enemies. The Boxers have adopted a flag bearing the motto:

'Up With the Ching Dynasty
And Down With the Foreigner.'

The Boxer Society was evolved out of that celebrated secret association which is known in the North by the name of Peh-hen-hui (White Lily Society) and in the South by the San-hohhui (Triad Society). Like its mother association, it is a politico-religious organization with very simple tenets and strict internal regulations, the details of which are a sealed book to those not belonging to it.

All that is known to outsiders is that its members practice the art of boxing and profess that in virtue of a certain incantation which they recite mentally, their person is rendered proof to bullets and fatal weapons. The first historical mention of them occurs about the middle of the eighteenth century under the

reign of the Emperor Kienlung, when their organization went by the name of I-hwa-men-kiao (Patriotic, Harmonious Sect).

But it was not until the time of the Emperor Kiaking that the Boxers began to attract the attention of the ruling power. At the beginning of that Emperor's reign they were discovered to have obtained a strong footing in the country districts on the borders of Shantung and Honan, and their activity so rapidly increased that their sect or association was interdicted in 1809; but in spite of occasional persecutions they have since then steadily increased in power and numbers.

The Boxers.

In the early days of its existence, the political tendency of the association was antagonistic to the existing dynasty, and its whole energies seem to have been directed to its overthrow. Latterly, however, taking shrewd advantage of the growing friction between native Christians and non-converts, the Boxers have identified themselves with the latter's cause and adopted opposition to the foreign creed and its professors as their principal creed. Still more recently, to ingratiate themselves with those in power, they adopted the popular legend of "Hing-Tsing mieh yang" (Up with the dynasty! Down with foreigners!")

As to the alleged close connection between the Pekin court and the Boxers, there can be no doubt on the subject. In the first place it is a significant circumstance that the open manifestation of anti-foreign activity by the Boxers coincides with the appearance of Prince Tuan on the political stage at Pekin at the beginning of the year 1900. We

may here refer to an incidental description of that important personage. "Princo Tuan," we are told, "is a comparatively young man of a little past fifty years, strongly built and with a commanding presence." During the last few years he has been assiduously cultivating the acquaintance of all classes of men, and there are said to be several other traits in his character that distinguish him from the other members of the imperial family.

Is Seeking a Throne.

Evidently he is a man of lofty ambitions, for it is widely whispered that since the appointment of his son as heir apparent his aspirations mount no lower than the imperial throne itself. Be that as it may, there can be no room for doubt that he is deeply implicated in the Boxer agitation. To make his connection with the Boxers still more clear, it is stated that their leader, a notorious adventurer who made himself conspicuous in connection with an insurrection in Honan about 1888, has been staying with the Prince at his palace in Pekin, during which time they are supposed to have secretly plotted and intrigued together.

It is highly probable, as is generally believed in well-known circles, that the ambitious but inexperienced Prince is a dupe in the hands of the artful I-hwa leader, who has an object of his own in view in the great conspiracy, which is no other than getting himself in power at court. Whichever may be the greater dupe, there seems to be no doubt that these two men have been working hand in hand.

Numerous revolts instigated by the Boxers occurred between 1889 and 1895,

and, as foreign aggression on Chinese territory became more marked in the succeeding years, the society began a relentless warfare against missions, schools and hospitals, which finally culminated in the general uprising of 1900, in which missionaries and merchants alike were massacred and European and American property laid waste and destroyed.

For almost a year before these developments in China Christendom had been shocked with stories of outrage upon missionaries perpetrated by the Boxers, of the Society of the Righteons Fist, or of the Big Sword. Early in the spring of 1900 these stories increased in number and in April and May, 1900, scarce a day passed without rumors from China of repeated atrocities. The Boxer movement spread rapidly until the powers were aroused by the beginning of wholesale slaughter of Christians, native and foreign, and the destruction of churches and missions of all denominations. What follows is a chronology of events attending the Boxer agitation.

Complaints of Outrages.

Early in June complaints of Boxer outrages increased. Russia offered to put down the Boxer uprising. Many mission stations were reported destroyed. United States Minister Conger sent a message to Washington complaining that the Pekin government was inactive.

On June 6th the mission at Yan Tin was burned and missionary Robinson was killed and mutilated. Immediately reports from China indicated a dangerous increase in Boxer disturbances. Great Britain landed troops at Cheefoo.

On June 8 American missionaries in various parts of China asked President McKinley for protection. The Chinese foreign office refused the use of the railroad to Pekin to foreign troops. Next came the news that the City of Tung Chow, near Pekin, was burned and twenty missionaries killed. China protested against the presence of foreign troops.

Attacks on Foreigners.

Early in June, Chinese mobs compelled all foreigners to seek refuge in the legations, which were surrounded by armed Boxers. The threatening aspect of affairs in Pekin caused great anxiety among the European Powers and in the United States. The Chinese Emperor petitioned the Powers to aid him in quelling the Boxer uprising. It was announced that Prince Tuan had been made Minister of Foreign Affairs. The Empress Dowager forbade foreign troops to enter Pekin. On June 15th the Japanese legation was burned and the Chancellor killed. On the same date, 4,000 Russian troops were landed at Taku. The next day Pekin mobs attacked foreigners and besieged the legations. England immediately ordered six regiments from India to China, and 1200 American troops were landed at Taku.

On June 21st, the American Cousulate at Tien-Tsin was destroyed. United States Admiral Kempff urgently asked for more troops and ships, and the Ninth United States Infantry sailed for Taku. About this time, United States Admiral Remey was ordered to China. The Chinese minister at Washington asked for an armistice, which was refused. The next day, June 26th, 3,000 Japanese troops were landed at

Taku. Admiral Seymour, (British) with an expedition, endeavored to reach Pekin, but was compelled to return to Tien-Tsin. It was stated that 60,000 Boxers were surrounding Pekin.

On July 14th, occurred the battle at Tien-Tsin, in which it was reported several thousand Chinese were slain. Admiral Kempff announced that the foreign ministers in Pekin had been ordered to leave, but refused. It was also stated that the Boxer uprising was spreading and southern provinces were in revolt.

Determined Fight.

In the first day's combined attack upon the native city over forty guns bombarded the Chinese positions. The fighting was most determined, and the allies' losses were heavy. Eight Chinese guns were captured, and the Chinese were driven out of the west arsenal after a fierce cannonade.

The guns of the allies did immense damage to the native city, causing many large conflagrations, and finally silenced the majority of the enemy's guns simultaneously. Then 1500 Russians, assisted by small parties of Germans and French, assaulted and captured eight guns that were in position on the railway embankment and the fort, the magazine of which the French subsequently blew up.

A body of American, British, Japanese and Austrian troops then made a sortie, and attacked the west arsenal, which the Chinese had reoccupied. After three hours of the hardest fighting yet experienced, the Chinese fled.

When the arsenal had been evacuated by the Chinese, the Americans, French, Japanese and Welsh Fusiliers advanced toward the native city, and joined with the other attacking forces. The Japanese infantry and a mounted battery advanced to the foot of the walls, supported by the Americans and French. Despite valiant attacks, the allies were only able to hold the positions gained outside the walls preparatory to renewing the assault in the morning.

The casualties sustained by the allies were exceedingly heavy, especially those to the Americans, French and Japanese.

Russians made up the right wing of the international column in the advance on the native town of Tien-Tsin. As they moved steadily over the open plain toward the entrance to the city the Chinese shelled steadily from the walls. The Russians lost 300 killed and wounded.

A Combined Attack.

During the night the Japanese, Americans and some English troops attacked the city on the left wing. The Japanese shelled the walls, and, making a breach, gallantly entered, first of all the international troops. The Americans occupied the most dangerous position and were forced to advance over absolutely unprotected ground. The Ninth Infantry and a handful of marines lost many killed and wounded. Colonel Liscum was killed while leading his men.

Li Hung Chang, the famous diplomat viceroy, having been summoned to Pekin from Canton, prepared to make his journey, which he declared was in the interests of peace. In reply to the British, French, American, German, and Portuguese consuls, who officially visited him in a body, Viceroy Li Hung Chang insisted that his departure for the north had a twofold object, namely,

to save the lives of the foreign Ministers in Pekin and to arrange the best terms of peace possible with the allied Powers.

For many days there was the utmost anxiety in our own country and in Europe concerning the representatives of the European Powers and the United States Minister, who, with the attaches of their offices, were shut up in the legations at Pekin, and were threatened with wholesale massacre by the Boxers. The air was full of conflicting reports, and definite intelligence was anxiously awaited. The allied Powers strained every nerve to reach Pekin with a rescuing force, and either save the foreigners there imprisoned or learn their fate.

Cheering News.

General Chaffee was in command of the American troops, and under date of August 15th, our government at Washington received from him the following cheering despatch:

"We entered Legation grounds at five o'clock last night with Fourteenth and light battery. Eight wounded during day's fighting. Otherwise all well. "Chaffee."

On the 19th a despatch was received from Admiral Remey which contained much interesting information in a few words:

"Taku, Aug. 18.—Telegraph line to Pekin is interrupted. Information from Japanese sources indicates that the Empress Dowager is detained in the inner city, which is being bombarded by allies. Chaffee reports that he entered Legation grounds on the evening of 14th. Eight wounded during day's fighting, otherwise all well. "Remey."

The startling feature of the despatch is that fighting within the city of Pekin was continuing, according to the advices of Admiral Remey. The inner, or, as it is popularly known, the Forbidden City, evidently had not been taken. It is surrounded by a massive wall of solid masonry more than twenty feet high, and it was not regarded as surprising that the Chinese should make their final stand within its shadows.

Prior to the receipt of the despatch it was accepted generally as a fact that the Dowager Empress, in company with the Emperor and a large suite, had left Pekin. While no surprise was evinced at the statement of Admiral Remey that the inner city was being bombarded, some-concern was expressed lest the final stand of the Chinese troops within what they regarded as most sacred precincts would prove a serious affair.

City of Pekin.

Pekin comprises practically four cities in one. In extent of area it is about the size of New York city. The four segments of it are the Chinese city, the Tartar City, the Imperial city and the Forbidden City. The last is the "Inner city," mentioned in Admiral Remey's depatch, and is the residence of the Emperor and the seat of the Imperial court. Nobody is allowed within its massive walls except by special permission of the Emperor or Empress Dowager. The foreigners who have entered. its gates are comparatively few in num-The Imperial city is occupied only by the highest Chinese officials and members and attaches of the Imperial

The Japanese Minister at Washington received the following under date of

August 17th from the Japanese Consul at Chee-Foo:

"The foreign forces attacked on the castern side of Pekin Wednesday morning. The enemy obstinately resisted. In the evening the Japanese blew up the Chiao Yang Gate and the Tung Chih Gate of the Tartar city and succeeded in entering. In the meantime other foreign forces entered the Chinese city by the Tung Pien Gate. Detachments were sent immediately to the legations and opened communications. The Ministers and staffs were found safe. The Japanese loss was over 100, including three officers. The Chinese loss was computed at about 400."

Foreigners Safe.

Substantially the information contained in the above despatch was received by the Associated Press direct from Tokio. It contained the explicit and reassuring statement that "the Ministers and staffs were found safe." The officials of the Japanese legation were much gratified at the conspicuous gallantry displayed by the Mikado's forces during the advance upon Pekin, and they received with unconcealed pride the congratulations not only of the officials of our Government, but also of the diplomatic representatives of other countries at the capital.

Another account is as follows, furnishing additional particulars:

"The American and Russian flags were planted on the east wall of Pekin at 11 o'clock this morning (August 14th). The Indian troops entered the British Legation at one o'clock and the Americans at three. There was a joyful reception from the wall.

"The emaciated tenants could have

lasted but little longer. They had only three days' rations. The Chinese had been attacking furiously for two days. Four thousand shell fell in the Legation during the siege. Sixty-five were killed and 160 wounded.

"The Japanese began the battle before daylight. The plan was to make a general attack on the 15th, and the troops were arriving at camp, five miles east, all night. They were completely exhausted, and slept in the corn fields in the rain.

Allies Press On.

"The Generals, however, alarmed at the sounds of a heavy attack on the Legations, bushed forward independently, the batish, Americans and French on the left of the river and the Russians and Japanese on the right. Beginning at two o'clock in the morning, the Japanese diverted the brunt of the resistance to the northern city, their artillery engaging the Chinese heavily there.

"The Americans and British met with but little resistance until they entered the city, where there was street fighting. Reilly's Battery attempted to breach the inner wall. The troops finally entered the foreign settlement through the canal. Company E, Fourteenth United States Infantry, planted its flag on the outer wall, Musician Titus scaling the wall with a rope, by means of which the others climbed to the top."

Following the capture of Pekin efforts were made to restore peace and order in China. Germany took a firm stand in demanding the punishment of all officials and others who were in any way concerned in the murder of the German Ambassador, Baron Von Ketteler, who

was inhumanly put to death on June 16th.

A proposition from Emperor William II was submitted to the Powers, but this was rejected by the United States, the object of our government to leave Pekin on October 4th.

being to avoid all complications in the settlement of the Chinese question. Germany modified her demands and an agreement was reached, under the terms of which the United States troops began

THE GREAT GALVESTON DISASTER.

O calamity that ever visited this country was more destructive of life and property than the hurricane which swept over the city of Galveston on September 8th. For several days the weather reports had indicated a coming storm of great severity, but the people of the fated city relt no serious alarm. Buddenly they were overwhelmed by the waters rushing from the Gulf, driven by the fury of the winds.

It would be useless to attempt to convey any adequate idea of the heartrending scenes that followed the invasion of the flood. The whole town was overwhelmed, and it is safe to say that there was not a building in the whole city which was not either destroyed or damaged. The first reports indicated the loss of several hundred lives. The number grew to a thousand. Then it grew to two thousand. Finally it was stated that five thousand persons lost their lives either by drowning or by injuries received from falling buildings or floating debris. Still the horror grew, until the Governor of Texas expressed the opinion that at Galveston and other places on the coast, 12,000 persons lost their lives as the result of the hurricane.

Families were rent asunder, husbands and wives were separated; in some instances whole families of half a dozen or more were swept away, and in other large families escaped. Many persons who had lived in comfort all their lives were reduced to poverty and want in a moment. Business men found their factories and stores had been swept away and they were compelled to begin life over again.

Heartrending details were furnished the public concerning the awful devastation and the terrible calamity which overtook thousands of families in the storm-stricken city.

The whole country sprang to the aid of the sufferers. Train loads of provisions and clothing were hurried to the scene of the disaster, and hundreds of thousands of dollars were contributed, these acts of beneficence proving how deep and heartfelt was the sympathy for those suddenly plunged into want and sorrow. Nurses and doctors went from various cities in the North, South and West, and all that human skill and power could do to mitigate the sufferings of the victims was rendered by willing hands and hearts.

Galveston is situated on an island. It is noted for many peculiarities, there being among other matters of importance, about fifty millionaires, the richest city, per capita, in America; many magnificent dwellings and imposing public buildings. It is called the "Oleander City" on account of the vast quantities of that beautiful plant everywhere visiinstances only one or two members of ble, whole streets being lined with it.

The whole civilized world was shocked at the assassination of Humbert I, King of Italy, on the 29th of July, 1900. He was born March 14, '1844, and was the son of King Victor Emmanuel and of Queen Adeliade of Austria. At the battle of Custozza, in 1866, he acted as a lieutenant-general. In 1868 he was married to his cousingerman, Maria Margaret of Savoy, and in 1878 he succeeded his father as King.

The intelligence of King Humbert's untimely death was received throughout Europe with profound dismay, as it was thought to indicate a wide-spread conspiracy to assassinate crowned heads. It was considered proof positive that the spirit of anarchy was rife in many parts of Europe, and that the emissaries of destruction had found a lodgment in America, as the assassination of King Humbert was known to have been planned in Patterson, New Jersey. The dastardly crime had the effect of redoubling the vigilance with which European sovereigns are guarded.

Presidential Election of 1900.

After an exciting and hard-fought campaign the Republican party was successful in the Presidential election of 1900, President McKinley being reelected by an overwhelming majority, both of the electoral college and the popular vote. McKinley carried six States that elected Bryan electors in 1896, namely, Kansas, Nebraska, South Dakota, Wyoming, Washington and Utali, and lost one State, Kentucky. The six States thus gained have 32 electoral votes, while Kentucky has 13, a net gain of 19 over 1896. In the electoral college McKinley had 202 | a few guerillas in the field.

votes and Bryan 152, while McKinley's popular majority was over 700,000.

The census of 1890 showed a population in the United States of nearly 63,000,000; the census of 1900 figured up a grand total of 76,215,129.

Death of Queen Victoria.

On the 22nd of January, 1901, occurred the death of Victoria, Queen of Great Britain and Ireland and Empress of India. She was born May 24, 1819, and was the only child of Edward, Duke of Kent, a son of George III, and Maria Louisia Victoria of Saxe-Coburg. who was a sister of Leopold I, of Belgium.

On the death of her uncle, William IV, she succeeded to the throne on the 20th of June, 1837, and was crowned Jane 28, 1838. In February, 1840, she was married to Prince Albert of Saxe-Coburg Gotha, with whom she lived happily and in whom she found a prudent counsellor. She was the mother of nine children, the eldest of whom came to the throne at her death as King Edward VII.

The reign of Queen Victoria was the longest and most prosperous in English history. She was endowed with many eminent virtues, was a woman of pure and blameless life, adorned the station she occupied rather than being elevated by it, and left behind her a memory that will long be revered by the millions of her subjects.

The war between the British and the Boers was practically ended by the generalship of Lord Roberts, commander of the British forces. The main armies of the Boers were scattered, leaving only

President McKinley's Second Inauguration.

With a superb military and civil demonstration which drew a vast concourse of people to Washington, President McKinley was inaugurated the second time on March 4th, 1901. No pageant on so grand a scale ever before attended any inauguration. Hon. Theodore Roosevelt, of New York, took the oath of office as Vice-President.

In his inaugural address Mr. McKinley spoke as follows: "When we assembled here on March 4, 1897, there was great anxiety with regard to our currency and credit. None exists now.

"Four years ago we stood on the brink of war without the people knowing it and without any preparation or effort at preparation for the impending peril. I did all that in honor could be done to avert the war, but without avail. It became inevitable; and the Congress at its first regular session, without party division, provided money in anticipation of the crisis. It came. The result was signally favorable to American arms, and in the highest degree honorable to the government. It imposed upon us obligations from which we cannot escape."

Capture of Aguinaldo.

On Thursday, March 28th, General Emilio Aguinaldo was captured. General Frederick Funston, having learned of Aguinaldo's whereabouts, took a detachment of American soldiers and natives, and in due time arrived at the village where Aguinaldo was concealed. The Tagalos went ahead to greet General Aguinaldo, and the column followed, finally arriving at Palanan.

General Aguinaldo's household troops,

fifty men in neat uniforms of blue and white and wearing straw hats, lined up to receive the newcomers. General Function's men crossed the river in small boats, formed on the bank, and marched to the right and then in front of the insurgent grenadiers. The Tagalogs entered the house where General Aguinaldo was. Suddenly the Spanish officer, noticing that General Aguinaldo's aide was watching the Americans suspiciously, exclaimed: "Now, Macabebes, go for them!" The Macabebes opened fire, but their aim was rather ineffective, and only three insurgents were killed. The rebels returned the fire.

On hearing the firing, General Aguinaldo, who evidently thought his men were merely celebrating the arrival of reinforcements, ran to the window and shouted:—"Stop that foolishness! Quit wasting ammunition!"

Hilario Placido, one of the Tagalog officers and a former insurgent major, who was wounded in the lung by the fire of the Kansas regiment at the battle of Caloocan, threw his arms around General Aguinaldo, exclaiming: "You are a prisoner of the Americans."

Colonel Simeon Villia, the rebel chief of staff, Major Alambra and others attacked the men who were holding General Aguinaldo. Hilario Placido shot Colonel Villia in the shoulder. Major Alambra jumped out of the window and attempted to cross the river. It is supposed that he was drowned. Five other insurgent officers fought for a few minutes and then fled, making their escape. When the firing began General Funston assumed command and directed the attack on the house, personally assisting in the capture of General Aguinaldo.

President McKinley, the third Chiefling. He was beaten and buffeted by the Magistrate of the United States to be crowd, and the Buffalo police had diffiassassinated, was shot twice by an Anarchist on September 6, 1901. The man gave his name as Leon Czolgosz. parents were foreigners, but he was born in the United States. The wounds were inflicted by a 32-calibre revolver.

The shooting occurred in the Temple of Music of the Pan-American Exposition at Buffalo. It had been planned in the most cold blooded manner. An organ recital had just been given. Surrounded by thousands, with the plaudits of the admiring multitude ringing in his ears, the President was shaking hands with those who pressed around him.

Carried Concealed Revolver.

Secret service men and local detectives had been watching a man whose actions had aroused their suspicions. He shook hands with the President, and passed on. The next man in line had his right hand concealed in a sling. While he was grasping the President's hand with his left, two shots suddenly rang out, and Mr. McKinley staggered back into the arms of bystanders. The sling had concealed a revolver, and the weapon had been discharged while almost touching the President's body.

other entered the abdomen and perfor- solemnly impressive. ated the walls of the stomach. The surgeons cut for this bullet, but were unable to find it.

A wave of popular grief and consternation swept over the country at the news.

The murderer narrowly escaped lynch-terror.

culty getting him in safety to his cell. So excited did the crowds that thronged Buffalo's streets become that for a time the authorities were contemplating calling out the militia. The whole civilized world united in angry condemnation of the horrible deed, and from all the governments came messages of sympathy for the illustrions victim and of execration on the head of the cowardly murderer.

The Final Scenes.

For nearly a week strong hopes were entertained of Mr. McKinley's recovery. One bullet was extracted but the other could not be found. The high hopes were suddenly blasted and one week from the day of the shooting the President suffered a relapse which ended in death on the morning of September 14th.

Obsequies of the most sorrowful and imposing character followed in Buffalo, in Washington and at Canton, Ohio, where the body was interred. Members of the Cabinet and a host of other celebrities testified by their presence their respect for Mr. McKinley and their admiration for his noble virtues and exalted character.

Vice-President Roosevelt took the One ball entered Mr. McKinley's oath of office as President. The cerebreast and glanced off, inflicting only a mony took place at Buffalo on the day flesh wound. It was extracted. The of President McKinley's death, and was

The assassin was convicted of murder in the first degree and sentenced to be executed in the week beginning October 28, 1901. The night following he was removed to Auburn penitentiary. Arriving at the prison, he collapsed with



APPENDIX B.

Canada in the Nineteenth Century.

T may strike citizens of other countries as a somewhat large assumption, nevertheless it may be confidently claimed, that in no other country has constitutional government made such solid and lasting progress, during the century, as in Canada. More than that, it may be claimed that not only has Canada led the way—she has actually forced the way and is still well in the van.

This is not intended to carry with it any disparagement of the American Constitution. That wonderful document is a product of the last century; it was born full-grown. It seems to have been the design of the Fathers to make change as difficult as possible. They made it almost impossible, and the present situation is a testimonial at once to the perspicuity of the framers of the Constitution and the law-abidingness of the people who live under it. In Canada the situation as to Constitutional changes is very different. There is nothing that cannot be changed at the will of the Canadian Parliament, or of the Imperial Parliament, and the changes during the century have been many and important.

It is a mistake frequently made by historians, to assume that the modern British Colonial system—at once the wonder and envy of, and the greatest fact in, the world—is due to the exercise of wisdom forced upon the British government by the loss of the American Colonies. Nothing of the kind. The British government's treatment of its colonies after the American Revolution

was, if possible, still more arrogant and stupid than it had been before. Nearly every one of the blunders of administration that drove the Americans into revolt was repeated toward Canada. The attempt to rule the colonies from Downing street was persisted in for fifty years, and it was not abandoned until the flag of rebellion had been raised and it was seen that the choice lay between reform and perpetual ferment.

The concession of responsible government—i. e., absolute freedom from dictation by the British government or Parliament in domestic affairs—was first made to Canada. It was made in full view of the probability—nay, many statesmen thought it was a certainty—that the concession would lead to speedy severance of the tie between the colony and the mother country. The exact contrary has been the case. With the colonies satisfied and settling their own quarrels the British Empire has leapt into new life.

The Colonial Empire is no longer thought a burden, but it is recognized that it is the Colonial Empire alone which gives Britain its prestige as a world power, and that responsible government is the factor which is leading up to closer union. Within the last year or two, there have been taken most important steps which have no logical outcome but the Federation of the British Empire.

Canada has of her own motion, without asking any return, made a tariff preference in favor of Great Britain to the extent of one-third of the tax levied, and in conjunction with the other leading colonies she has sent her sons to the battlefields of South Africa, to fight for the solidarity of the Empire.

All the progress that has been made is a natural evolution. Yet, the wisest statesman of his time would not, at the commencement of the 19th Century, have dared to predict a favorable situation for Canada at its close. The 19th Century did not open auspiciously for

Invasion, loss of independence, national annihilation, was the prospect. The French, after a long armstice, had resumed war. The Armed Neutrality—practically a universal league against England—had been revived. Even Pitt was despondent, and his cabinet was divided, part being in favor of peace at any price. The internal distress was as great as the outlook was depressing. The severity of the situation may be gleaned from the fact that while wages



PRETORIA DAY IN TORONTO, LOOKING NORTH ON YONGE STREET

Canada. All the world was at war, and had been so for many years back. In the course of the wars, the British Empire had been rent in twain, the public debt had risen to unimaginable dimensions, the country and its credit were supposed to be completely exhausted, and yet it was palpable that struggles and trials immensely greater than any that had been undergone had soon to be faced.

The star of Napoleon was strongly ascendant. It was not merely loss of possessions that the country feared.

were not one-half of the present figures, wheat was worth \$3.75 per bushel.

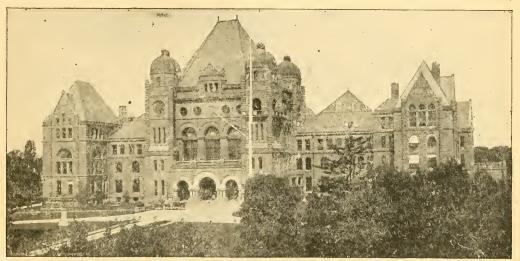
The one bright hope of the nation was in her naval strength. That had been growing prodigiously as the result of her trials. In the early years of the century came victory after victory. At length, Britain had shattered all her rivals at sea, and even the most despondent came to recognize that whatever else might happen, the Empire could not be seriously damaged except from within.

The dwellers in what is now Canada

had their full share in all these anxieties and in addition had some very formidable troubles of their own. Not only did they stand to lose by every loss made by the Empire, but it was for many years an open question whether the Empire might not, at a push, attempt to save itself by throwing Canada to the wolves. They had already experienced one notable sequence of this kind. When Britain made up its mind to recognize American Independence, her statesmen also made up their mind that

American government had authorized its delegates not to press for this land, which fact the British government ought to have known. Anyhow, away went the land. The loss of it must have been a severe wrench to the loyalty of the British North Americans; in fact, such a surrender could not have been made had it not been for the peculiar composition of the British North American people.

recognize American Independence, her These were mainly of two classes: statesmen also made up their mind that (1) The French of Quebec and Acadia,



ONTARIO PROVINCIAL PARLIAMENT BUILDING-TORONTO

to drive a wedge between France and the United States was of supreme importance.

So in the final treaty of peace, the Americans got not only all the territory they were entitled to, but the British also gave them as a free gift all that part of Canada which now forms the States of Ohio, Indiana, Michigan, Illinois and Wisconsin.

In extenuation, it may be said that the British government thought the country it ceded was worth nothing; and against this it may be urged that the the offspring of military settlers; as Frenchmen, sore against the Mother Land which had surrendered them to England; Royalists almost to a man and as such and as ardent Roman Catholics utterly hostile to the French Revolution and all that it implied and almost equally dreading the American Revolution; also embittered against the Americans by the knowledge that it was in deference to American complaints that England fought France in America.

(2). The other principal component of

the population was the United Empire Loyalists—the "Tories" who emigrated, or who were driven with the grossest cruelty and indignity from the United States at the close of the war. This movement was one of the great emigrations of history. It exceeded many times over in numbers the great Boer Trek of which we have heard so much, and the results of it have been much more important. The U. E. Loyalists were by no means the riff-raff which it has pleased some American writers to call them.

Early Immigrants.

On the contrary, they were distinctly of the better class of Americans. They included the more recent arrivals from Britain; the official class and all those whose business threw them in contact with the colonial authorities. The task they undertook in emigrating to Canada was one of much greater magnitude than that faced the Boers on any of their treks. They had to face, unprepared, a climate of great rigor, to settle a country almost unknown, and in nearly all cases they were not by previous habits of life well calculated to endure the hardships they had to encounter.

From the very first, the people were devotedly loyal to the British Crown; how could it be otherwise, composed as the population was, with the United States to draw off every emigrant or other person with any sentiment of hostility to Britain? Such a people would and actually did submit as graciously as possible on every occasion when Britain in the attempt to create a better understanding with the United States sacrificed Canadian interests—as they were sacrificed on several occasions.

For the first decade of the 19th Century, however, the British North Americans lived in fear of absorption into the United States; this, notwithstanding that the continuous naval victories of Britain kept war away from American shores. But it is certain that the different French governments did not abandon the idea of some day recovering Canada. They had agents in Canada, in the United States, and among the Indians, stirring up anti-British feeling all the time. One of these agents, named McLane, was actually convicted and executed at Quebec.

Loyal to the Core.

The British forces in Canada were not more than a mere handful, and if there had been any treasonable spirit abroad, history might have had another page to it. That, however, the country, and especially the French part of it, was loyal to the core is proved by the fact that the Roman Catholic clergy in Quebec used to perform Te Deums whenever news arrived of any such British success as the Battle of the Nile, St. Vincent, Copenhagen, or Trafalgar.

Yet the fear of war with the United States subsisted. Britain was continually exercising her right of searching American vessels, and impressing British subjects found therein. It is likely that the searching was neither conducted in, nor submitted to in the very best drawing-room manner. In 1807 the British man-of-war Leopard on the high seas attacked the American man-of-war Chesapeake, on the refusal of the latter to yield up some British seamen.

This rupture created much excitement in both Canada and the United States.

Forty Americans were killed and wounded in the affair and the British seamen were taken by force.

Naturally enough a storm of indignation arose in the States. Nevertheless, war did not then follow. As a matter of fact, Britain offered reparation for the affair and the whole matter might easily have been settled, but unfortunately the state of American party politics was such that nothing but a war with Britain would secure the salvation of the Republican party and the re-election of President Madison.

This is one of many instances furnished by modern history in which great public interests have been made to bend to the exigencies of political parties. It is believed that the second war between Great Britain and the United States could have been averted by wise statesmanship and that patience and conciliation which are good for both the individual and the nation.

A Foolish War.

It is not necessary here to narrate the history of Napoleon's Berlin and Milan decrees, and of the British Orders in Council issued in retaliation. Suffice it to say, that both the French and British injured the United States shipping interests, but by all the canons the French being the aggressors, the United States should have gone to war with France instead of England. But it suited best to attack England and Canada on the cry of "Free Trade and Sailors' Rights;" and thus and so did one of the most foolish and wanton wars of history begin.

The history of that war is wholly creditable to Canada. The American government had supposed that a great

number of Canadians would revolt against the "tyranny" of Britain. On the contrary, the Canadian people rose as one man and, along with a mere handful of British troops, led by indifferent generals, they gave the Americans a rude awakening. Defeat after defeat was inflicted upon superior American forces.

In quick succession came the loss of Mackinac, the surrender of Detroit, the defeat at Oueenston Heights, with a loss of 250 killed and wounded and 900 surrendered. In the next campaign the Americans had learned they could not "rush" Canada. They brought up largely increased armies and achieved some success, nevertheless they had to submit to mortifying defeats at Raisin River, Stoney Creek, Beaver Dams, Chateauguay, and Chrysler's Farm, and at the end of the year were no better off than at the beginning. The campaign of 1814 brought the Americans the bloody defeat of Lundy's Lane, with a loss in killed and wounded of 800 out of a force of 5000.

The Capitol Burned.

In the same year, a British force burned the Capitol at Washington and Navy Yard, and won the battle of Bladensburg. The Americans have ever esteemed this an act of vandalism, but it was at least an offset to several similar exploits of their own, such as the burning of the Parliament Buildings at York (Toronto), and the burning of unoffending villages such as Newark, Port Dover, etc., acts not justifiable in modern war, and so admitted to be by the more moderate American historians.

While the land campaign had been a perfect failure from the American point

of view, the naval campaign had been full of equally uncomfortable surprises for the British. The British government appear to have been totally without information as to the American naval strength. At no time did they send one-twelfth of their navy against the United States, and the ships they sent were individually smaller and less powerful than the American vessels.

The consequence was that the supposedly invincible mistress of the seas received a quick succession of staggering blows; from which no doubt valuable lessons were learned. But too late to be of any use in that war, for on Dec. 24, 1814, a Treaty of Peace was concluded. Both nations were heartily sick of the affair. At no time did Britain want war with the United States. All she desired was that the United States should not be made use of by Napoleon in furtherance of his plans for creation of a world empire. As for the American people, in 1814 the opinion was all but universal that the war they had was not of the kind they wanted.

The Treaty of Peace.

It was one thing to attack Britain when her face was set against a whole world in arms, led by the invincible Napoleon, and to attack a supposedly helpless and disaffected Canada. It was altogether another thing in 1814 with Britain victorious all along the line, with Napoleon caged, as he was supposed to be, safely in Elba, and with the British people demanding that their government send out Wellington with his Peninsular army, and a sufficient fleet at his back. Besides, in 1814 Madison's second term was assured and

there was no election pending. Everything, in fact, made the peace immensely popular. It is worthy of mention that not one of the causes of war as described in the American Declaration was mentioned at all in the Treaty of Peace.

Canada came out of that war a different country. She began to feel sure of herself and the work of development went on apace. The task which the people had before them was one of enormous magnitude. The domestic situation of the people may be described as one of almost unconquerable difficulty in the midst of abounding plenty.

At the beginning of the century, Lower Canada contained about 250,000 people; Upper Canada about 30,000, who doubled themselves within the next six years.

Life in the Backwoods.

A great number of them were persons who had been gently nourished and were suddenly called upon to face the same kind of a backwoods life that confronted the Pilgrim Fathers at Plymouth Rock. The pioneers of this generation, even in the Klondike, have no conception of the severity of the life their forefathers led. The latter had no tools but the axe, the plough, the sickle, the scythe, and the fork. They had to carry their seed and supplies on their backs over so-called roads that were only trails or bush tracks and were wholly impassable by horses.

They had not only to swing the axe, but to learn how to do it; and not merely to hold the plough but often to yoke themselves and their wives and pull it. They had to cut their wheat by hand, to thresh it with the flail, to

winnow it in the wind, and to pound it into a kind of meal in mortars, or often in a hole excavated in a hardwood stump.

Altogether, the requirements made of the early 19th Century pioneer in Canada were such that the persons who survived it must have been very clear wheat indeed. One of the pleasant features of it was that there was no trouble with the Indians. There are no tales of massacre of, or by the Indians who were "moved on" during the great expansion of Canada during the first half of this century.

The rights of the Indians were strupulously respected. Every acre of their land was bought and paid for, and its former owners provided with new homes before white men were allowed to enter upon it. The consequence of this humane and just policy has been that the Canadian Indian tribes, whose former history was one of turbulence and bloodshed, have settled down and attained an advanced degree of civilization and are as flourishing and contented as any part of Her Majesty's subjects.

A System of Tyranny.

Hard as was the pioneer life, it was aggravated by many unnecessary evils. The system of government was tyrannical and irresponsible. The British government kept sending out officials who were bumptious and arrogant to a degree, and appeared to be animated by an idea that the country existed for their benefit. They obstructed necessary reforms, were corrupt and partial in their administration, and allowed themselves to be led by cliques to such an extent that life became a burden to all who were not "with the government."

Especially against settlers from the United States, of whom a great many came in immediately after the war, was the official ill-feeling shown. So that while settlement went on apace, business flourished, the vast Canal system set on foot, and educational and religious institutions were being planted, political unrest existed. What aggravated the people most was the Clergy Reserve question. In 1791 land had been set apart in Upper and Lower Canada as endowment for "the clergy."

These endowments were claimed by the "Established Church," which took the position that the clergy meant the Church of England and Scotland clergy. A furious controversy raged for years around this question, the government of course siding with the privileged class. This was but one element of the discontent. The government was not really representative; it was a mere shadow of freedom that the people, except the ruling class, enjoyed.

Outbreak of Rebellion.

The new American settlers were of course restive under such a condition. Their situation was very much like that of the Transvaal Outlander of 1890–9, and they were not slow in expressing their opinion of it. Things went from bad to worse, the government resisting every reform until rebellion actually broke out in 1837–39, both in Upper and Lower Canada, under William Lyon Mackenzie in the former and Louis Joseph Papineau in the latter.

In Upper Canada the affair collapsed after a mere riot. In Lower Canada it was more serious. In both provinces the risings were early crushed and the ringleaders thrown into prison. As many as 180 were sentenced to be hanged, but these sentences were only carried out in a few cases, the other sentences being commuted to transportation to the Antipodal penal settlement.

Among the persons transported were many Americans who, under the usual American misinformation as to the state of feeling in Canada, had joined the insurgents under the delusion that they represented a revolutionary instead of a reform movement. The United States government had been very lax before and during the Rebellion, consequently ill feeling on both sides again arose very high.

This was aggravated by the daring act of a few Canadians, who by night crossed the Niagara river, seized an American steam vessel named the Caroline, which had been used by the tebels, set her on fire and turned her adrift. The boat went burning on towards the Falls, probably went to pieces on striking the rapids for she was never seen again. An American citizen was killed during the attack.

Diplomatic Correspondence.

A good deal of diplomatic correspondence followed, but no compensation was ever made by Britain. It is probable that American claims in this respect were traded off against counter claims on the United States for undoubted laxity in not preventing American citizens from giving aid and comfort to rebels.

Out of the Rebellion grew Reform. The British government sent an able man, Lord Durham, to report on the condition of affairs. This Report is

one of the ablest documents in constitutional annals. If it had been adopted as a whole it would have ended Canadian discontent. As it was, it set rolling a ball which did not stop. Upon it the British government founded a new constitution for Canada, that of 1841. By it, Upper and Lower Canada were united into a Legislative Union under the name of "The Province of Canada."

It was only a compromise. It gave equal representation to each Province. As Upper Canada was increasing much the more rapidly, a cry against the injustice and in favor of representation by population, was at once started up. The composition of the Upper Chamber was also defective, as it was too much the slave of the government. It soon became evident that this Constitution would be short-lived. Nevertheless it passed some good Reform measures.

The Clergy Reserves.

It settled the vexed question of the Clergy Reserves by first taking care of the life interests, and then diverting the endowment to educational purposes. It abolished the Seigneurial tenure, or Feudal system, under which land had been held in Quebec. But government under it became more and more difficult, as the Upper Province's grievance about insufficient representation began to grow.

At length the occurrence of the American War of Secession drew the attention of the people to the desirability of uniting themselves for the purpose of self-defence and advancement. Public opinion forced the hands of the polititicians. The leading men of both parties agreed to sink all their differences and combine together to effect a

confederation of all the British North American Provinces.

At the same time the seaboard colonies were moving toward a Maritime Confederation. Approaches were made toward them, and the upshot of it was that delegates were appointed and a grand conference was held, at which a scheme for the Confederation of all the British North American Colonies was agreed upon. The scheme so agreed upon was embodied in a Bill which was submitted to and carried by the Imperial Parliament, under the name of "The British North America Act, 1867." By that Act was called into existence the Dominion of Canada, with a Constitution similar in some respects to that of the United States, in that the country is a Confederation, but differing materially in certain respects.

The Dominion Parliament.

The Canadian statesmen thought to avoid certain weaknesses that had been revealed in the American Constitution by the War of Secession, lately closed. Instead, therefore, of the State or Province being the unit, as in the United States, in Canada the residuum of sovereignty, that is all powers not delegated to either Confederation or Province, is reposed in the Dominion Parliament, the Provinces simply having power over the matters delegated to them, and even there the Provincial Legislation is subject to revision by the Dominion Parliament.

Sufficient time has not yet elapsed to prove whether this arrangement will work permanently. There have been fierce controversies between the Provin- could be found. It was necessary to ces and the Dominion on matters arising | consider the feelings of the smaller

out of jurisdictions. Among them were the Rivers and Streams Case, in which the Dominion undertook to disallow an Act of the Ontario Legislature, dealing with the flotation of lumber on running waters.

Another was the Manitoba Schools Case, in which the Dominion disallowed Manitoba legislation abolishing separate schools for Roman Catholics. In both cases the controversies ended in the discomfiture of the Dominion government; in the latter, the indignation aroused throughout the Dominion by the attack on Provincial rights contributed largely to the ejection from office of the Conservative Party in 1896.

So far the lesson to be learned from the history of the controversies is that the power to disallow Provincial legislation is a most dangerous one to its possessor. Provincial feeling is sure to fire-up in the event of any interference from Ottawa, and it is quite plain that a wise statesman would never use the power unless urgent consideration of public safety compelled him to do so; and even then he would probably lose more political capital than he would make.

Make-up of the Senate.

Another fundamental difference between the Canadian and the American Constitutions is in the composition of the Senate. Canada had so recently come through an agitation for representation according to population, that an arbitrary two Senators for each State was a quite inadmissable scheme, absolutely certain to give dissatisfaction.

No good plan acceptable to all parties

Provinces, so at length a compromise was agreed upon by which an equal number of Senators was assigned to Ontario and Quebec, and the same number for Nova Scotia and New Brunswick combined. These Senators are appointed for life by the Government of the day.

It was supposed that by this means a Senate had been formed which would be fairly in touch with the people, and a means was provided by which a small obstructive majority might be swamped if occasion arose. That was where a great mistake was made. In the generation immediately preceding Confederation there had been fierce political controversies and frequent changes of government. Everyone supposed that under the new constitution the parties would fairly alternate in terms of office.

But to the surprise of everybody, the new constitution worked the other way. The Senate has been reduced to an anomaly and a danger by the fact that during the past thirty years of Confederation, one party, the Conservative, held office for twenty-five years, and consequently the Senate became filled with Conservatives to such an extent that there was scarcely a corporal's guard of their opponents.

Senate very Obedient.

This did not matter much—except that the Senate was abjectly useless—as long as the Conservative party were in power. The Senate obediently passed every Conservative measure that was submitted. But in 1896 the Conservatives were ejected from office, and thereupon the Senate became a dangerous nuisance.

It began to reject the Liberal govern-

ment's measures for purely partisan reasons, and otherwise to obstruct the work of the House of Commons. Reform of the Senate, and the making it responsible to the people is therefore one of the leading issues in Canadian politics as this book goes to press.

In other respects the British North America Act has worked exceedingly well. Like all confederations it has proved expensive, for clashing interests have to be reconciled usually by expenditure of money. Under it a strong national feeling has grown up where formerly there was nothing but the spirit of loyalty to the Empire—and this without any diminution of the imperial loyalty, but with a decided increase of it.

Members and Territories.

The Dominion consists of the following members and territories:

Original Members—Ontario, formerly Canada West and Upper Canada, Quebec, formerly Canada East and Lower Canada.

Nova Scotia.

New Brunswick.

Rupert's Land, the possessions of the Hudson Bay Company were added to Canada.

1870. Manitoba admitted.

1871. British Columbia admitted.

1873. Prince Edward Island admitted.

1880. By Imperial Order in Council. all British Territories and possessions in North America and islands adjacent, not already included in the Dominion of Canada, except Newfoundland and its dependencies, were approach to Canada.

Districts—The Territories of Canada are divided into the following districts:

Keewatin.

Assiniboia.

Saskatchewan.

Alberta.

Athabasca.

Yukon (separate territory, 1898).

Mackenzie.

Ungava.

Franklin.

The area of the Dominion is 3,653,946 square miles.

The length of the frontier line is about 3000 miles.

As before stated, the political parties sank their differences and united, in order to bring about confederation. The work being done, and the statesmen having discovered, from close personal contact, that there were radical differences of opinion on nearly every subject, the parties fell apart into their original ranks.

The Great Northwest.

The first work of any magnitude was to acquire and provide for the government of the great Northwest. Unfortunately this was carried out in such a manner as to arouse the hostility of some of the peoples transferred. In 1869 a rebellion broke out under the leadership of Lous Riel, a French half-breed.

He had oratorical, but little material assistance from Fenian organizations in the United States. The affair might have been serious had it not been for the formidable force sent. An Imperial force, under Col. (now Lord) Wolseley, crossed the trackless wilderness between Lake Superior and Red River, but the insurgents dispersed on its arrival. was through solid rock. There were

A condition of the entry of British Columbia into Confederation was that a railroad should be built across the continent within ten years—a bargain which at that time was considered physically impossible of fulfillment. Soon after the bargain was made, a general election came on, and immediately afterwards it was discovered that enormous sums had been paid to the Premier's, Sir John Macdonalds, campaign funds by the contractors for the railway.

Such was the indignation aroused in the country that the government resigned. Hon. Alex. Mackenzie acceded to office and was sustained by the country after the dissolution which followed. He held that the bargain with British Columbia was impossible to fulfill and obtained a modification of it. He remained in office four years, during which much preliminary work on the C. P. R. was done. In 1878 Sir John Macdonald returned to power on the Protection cry.

Canadian Pacific Road.

As soon as the protection question had been dealt with he took up the Canadian Pacific, made an agreement with a syndicate who, in return for \$25,000,000 and 25,000,000 acres of land and the gift of the works already completed, agreed to build the line in ten years, and thereafter to own and run it. The company set to work with almost superhuman energy and actually completed its road, 2000 miles, some of it of exceeding difficulty, in fifty-four months, instead of in the ten years allowed by the contract.

More than 300 miles of the road

bridges without number, some of them very large and high, and many costly tunnels. Altogether it was an achievement in railroad building which has not yet been surpassed anywhere.

But there had again been a failure to consider the feelings of the people, whose mode of life had been upset by the sudden entrance of civilization. The government had not treated fairly the Indians and Half-breeds whose lands had been taken. Rascally agents and careless and incompetent ministers had combined together to create such a state of affairs that another rebellion broke out.

The discontented Indians and Halfbreeds sent for Riel, who had been living in Minnesota, and on his arrival took up arms. The first use made of the Pacific Railway was to transport troops for the suppression of the rebellion, the troops marching past a gap north of Lake Superior where the rails had not yet been laid.

Uprising Suppressed.

There was considerable loss of life in this rebellion, and had it not been that the government sent an overwhelming force (wholly Canadian except the commanding officer) there might have been a general rising throughout the Northwest. Even as it was, it is probable that the Canadian government owed its escape from a catastrophe to the fact that its treatment of the Indians had been traditionally just and gentle, and that the variation from its usual line had not been too widespread.

In 1878, the government, Hon. Alex. Mackenzie, was defeated by Sir John Macdonald, who had raised a cry in favor of Protection for home industries.

What gave strength to this ry was the feeling of resentment against the American government which, in deference to the anti-British feeling, had abrogated a Reciprocity Treaty formerly existing between Canada and the United States. The abrogation was made in the expectation that Canada, deprived of its markets, would become discontented and poor, and by and by would want to become part of the United States.

What it really did was to stir Canada up to provide markets of its own and to develop its export trade with Britain. The Canadian people readily followed Sir John's lead in the matter. They gave him an enormous majority. In 1879 the Protective Tariff was put in force. In 1882 Sir John was again returned to power, on the cry that the protective tariff needed increasing; again in 1887, and yet again in 1891.

New Premier.

Shortly after the last named election he died. He was succeeded in the Premiership by Sir John Abbott, who from ill-health resigned a year afterwards, and by Sir John Thompson who, after leading the Conservative party successfully for two years, died at Windsor Castle while he was in the act of awaiting the conferring of the dignity of Privy Councillor upon him by Her Majesty. The next Premier was Sir Mackenzie Bowell, who took the office in 1894. His party soon became disunited. The Manitoba School question which had been in politics for some time past, now pressed for settlement.

The Liberal opposition, under Mr./ (now Sir) Wilfrid Laurier, began to develop great strength. A cabal was formed against Sir M. Bowell in his

own party. He was forced to resign. Sir Charles Tupper was called to the Premiership, the life of Parliament expired soon afterward, the election came on and he was decisively defeated.

Sir Wilfrid Laurier acceded to power in June, 1896. He settled the Manitoba School Question by conciliation instead of disallowance. His first financial measure was to make a preference in favor of the importation of British manufacturers—first of 25 per cent. of the amount of the duties, subsequently increased to 34 per cent. As this was done without asking any concession from Britain, but as an acknowledgment of what Canada owed to the Mother Country, the measure was immensely popular in both Canada and Britain, and it constituted Sir Wilfrid the leading figure, after Her Majesty, in the imposing ceremonies which in 1807 celebrated the close of the sixtieth year of her reign.

Perhaps the most far-reaching event of the last few years for Britain and her colonies has been the entrance of the latter upon the field of battle in Africa, as their mother country's most valuable and efficient aid. Months before the outbreak of war Canada vol-

untarily offered aid, as did other colonies, in the event of aid being required.

As soon as Kruger declared war, Canada offered 1000 men, whose services were joyfully accepted. As soon as the reverses of the campaign commenced, Canada repeated her offer and her contribution was again accepted. A magnificent gift was made to the Empire by Lord Strathcona, formerly Sir Donald Smith, Governor of the Hudson Bay Company, and High Commissioner for Canada in London, also one of the syndicate who built the Canadian Pacific Railway. He raised and equipped a troop of 500 horse, who have done splendid service in the field.

Altogether Canada has contributed 3500 men to the South African campaign. They have won golden opinions by their courage, intelligence and ready adaptation to circumstances. They led the final assault which forced the surrender of Cronje at Paardeberg, and generally speaking have been well to the front on every possible occasion. Many of them have left their bodies, or their health, on the African veldt. But of the seed which has been sown who shall predict the glories of the harvest?

THE PROVINCE OF ONTARIO.

A brief outline of the political history of the principal province of the Dominion will not be out of place.

Ontario, formerly Canada West, and Upper Canada, and once a part of New France, is bounded on the east by the Ottawa river; on the west by a line drawn due north from the confluence of the Ohio and Mississippi rivers which strikes through the Lake of the Woods; on the north by the English river and

on the south by the United States boundary. It contains 220,000 square miles, not including the part of the Great Lakes within its limits, which part amounts to about 50,000 square miles. Its surface was in a state of nature almost wholly covered with dense forests of coniferous and deciduous trees, not one-quarter of which have yet been removed.

On entering confederation, the prov-

ince was under the control of a coalition ministry at the head of which was Hon. John Sandfield Macdonald. The leaders of opposition were Alexander Mackenzie, subsequently Premier of Canada, and Edward Blake, afterwards Minister of Justice in the Dominion, then leader of the Dominion opposition, and now member of the Imperial Parliament for South Longford and a leader of the Irish Home Rule Parliament.

Hon. John Sandfield Macdonald's government was a fairly able and economical one. Its management of the finances was careful, and as in the adjustment of accounts at confederation there was a large balance in favor of Ontario, the treasury accounts soon showed a large surplus. A policy of aiding railways was entered upon and bonuses were voted to the extent of several millions of dollars. A line of cleavage soon manifested itself as to the policy to be pursued.

Government Defeated.

Mr. Macdonald took the autocratic view that the government of the day should select the railway to be aided, while the opposition maintained that the selection should be left to the House. A crisis grew out of the dispute, and in December, 1871, the government was defeated on Mr. Blake's motion, that the House should make the selection. A ministry was formed under Mr. Blake, but soon afterwards that gentleman retired from the arena of provincial politics and Hon. Oliver Mowat, who had been on the bench for a short time, re-entered politics, and in October, 1872, became Premier of Ontario.

He retained the office until July, 1896,

a period of twenty-four years, at the end of which he resigned to enter Hon. Wilfrid Laurier's cabinet as Minister of Justice. In the meantime he had been knighted. His period of office was not only the longest in the history of British administrations, but was singularly almost uniformly successful. His financial administration was brilliant. He left the Province in what is probably the soundest position ever attained by an Anglo-Saxon community.

Money in the Treasury.

It is out of debt, has a large cash surplus in the treasury, and is possessed of solid assets of land and timber of the value of hundreds of millions of dollars. It fell to his share to bear the burden of a number of constitutional controversies with the government of Sir John Macdonald, and though the latter gentleman prided himself on his knowledge of constitutional law, he was on every occasion when the cases got before the Privy Council worsted by the Premier of Ontario.

There was also an acrid contest about the boundaries of Ontario, which was won by the Province. The contention of the Dominion was that Ontario extended westward only to about the head of Lake Superior, but it was established that the Province's claim to territory far to the westward was good. The reform of the judicature system, the perfection of the Liquor Licensing laws, the development of Municipal institutions, and the educational system were among the tasks performed during Sir O. Mowat's premiership,

On Sir Oliver's resignation he was succeeded by Hon. A. S. Hardy, who had been Provincial Secretary and

Crown Lands Commissioner in the preceding regime. After about three years of fruitful work, Hon. Mr. Hardy resigned on account of ill-health. He was succeeded in the Premiership in October, 1899, by Hon. G. W. Ross, L. L. D., who now holds the office. Dr. Ross was a member of the Dominion Parliament in which he distinguished himself as one of the most competent critics and sound debaters.

He was called by Sir O. Mowat to join the latter's ministry as Minister of Education in 1880. His tenure of this office was marked by the skill and courage with which he steered his department through several fierce controversies arising out of the peculiar situation in which the Canadian Provinces stood with regard to the education of religious minorities..

Rights of Minorities.

The rights of these minorities in Ontario and Quebec are secured by the British North America Act. The various questions arose out of differences of opinion as to the methods in which the guaranteed rights should be dealt with; whether grudgingly and according to the strict letter of the law, or according to the spirit of the law.

The government of which Dr. Ross was a member took the ground that the minority—Roman Catholic in this case—should be dealt with liberally; that the efforts of the Legislature should be to secure instead of to limit the rights of the minority. The consequence was that when the opposition sought to compel the use of the Protestant Bible in the Roman Catholic schools, the government placed itself on record as opposing what, in the shape

proposed, would have been persecution. At the ensuing election the government was sustained. So also at elections in which the leading questions were whether the Roman Catholic schools should be aided or hindered in the collection of their share of the school taxes; and again when it was sought by the opposition to proscribe the use of the French language in the schools. Altogether, Dr. Ross had a stormy term of office and it may safely be said that he left the Education Department not only with the respect of his friends, but with that of his political enemies also. His premiership has been distinguished by the taking of several important steps looking to the speedier development of the enormous natural resources of the Province.

Ontario Timber System.

Here it is proper to say a few words about the very successful manner in which the timber resources of Ontario have been managed. Ontario has about 180,000 square miles of timber land, vast areas of which will, when cleared, maintain a large agricultural population; but much of it cannot be profitably put to any other use than growing timber.

The system of administering the timber land is a peculiar one, which has been evolved out of the local circumstances and is proving immensely successful. The Province does not sell the land, but periodically, when the market is good, puts up for sale by public auction, the right to cut timber upon certain limits. The purchaser pays down a lump sum for this privilege, in addition to which he has to pay an annual license fee and certain dues at

per M. on all the timber he cuts, and he has to observe all the regulations which are made by the government from time to time both before and after his purchase.

It is not uncommon for purchasers to pay as much as \$1,000 bonus per square mile for the right to cut pine. Good judges estimate that notwithstanding that the Province has received many millions for pine sold, yet the rise in value has been such that the standing unsold lumber on the public lands is worth more to-day than the whole of the forests were at the previous time. And whereas, only a few years ago nothing but the pine was of any worth standing, now many of the Canadian soft and hard woods possess, standing, a value quite equal to that of pine.

Rich Timber Lands.

The whole of the northern part of the Province is densely wooded with spruce, poplar and other woods very valuable for purposes of making paper pulp. Large tracts of this land have been put under license during the last few years, and it will not be long, even if it is not already the case, before the cut of Canadian timber for the paper mills will exceed that for the lumber trade.

The forests in the southern part of the Province comprise white pine, of which valuable tree the only considerable body now standing is in Ontario; also, hemlock, cedar, tamarac, oak, elm, ash, maple, basswood, and other valuable trees for which a good market is now opening up.

It has recently been found necessary to prohibit the exportation of pine logs from Ontario. Michigan lumbermen had been purchasing Ontario limits and rafting the pine logs across the Georgian Bay to Bay City, Saginaw, etc., thus depriving Canadians of so much work. The effect of laying an embargo on the export of pine logs has been very beneficial to Canadian trade, and the step thus taken will doubtless be followed by others looking in the same direction.

Ontario's Agricultural Wealth.

Ontario is the finest agricultural Province of the Dominion, and its settled portion will compare for productiveness with any portion of the United States. The following are some figures relating to the more important crops of 1898:

		YIELD, PER ACRE.
	BUSHELS,	BUSHELS.
Fall wheat	25,158,713	24.00
Spring wheat.	6,873,785	17.70
Barley	12,663,668	28.90
Oats	86,858,293	36.60
Pease	13,521,263	15.60
Potatoes	14,358,625	84.00
Mangels	21,957,564	458.00
Carrots	4,313,861	347.00
Turnips	64,727,887	427.00
Corn	23,442,593	70.90
	10 1 200 062	tone I 70

Hay . . . tons 4,399,063tons 1.79 And all this in a Province where hardly an acre had been cleared at the beginning of the century.

Growth of Canadian Population.

If it were not that Canada is overshadowed by her gigantic neighbor, all the world would be wondering at the progress made by the former country during the nineteenth, which is practically her first century. As near as can be ascertained, there were in Canada in the year 1800, 230,000 persons, of whom some 50,000 were in Upper Canada. There are to-day between 5,250,000 and 5,500,000, an increase in the century of about 2400 per cent. This is a very much greater percentage of growth than was made by the United States during the century, or than was made by the British colonies in North America now composing the United States during their first hundred years.

Growth of Canada.

The growth in Canada would have been much greater had it not been that the French Province, because of the cession, has received very little aid from immigration. This, however, has been offset by the fact that the French in Canada have preserved their primitive virtues and vigor. They are among the most virile and prolific races. Families of twenty children are still quite common in Quebec; of thirty are not at all uncommon, and occasionally families much exceeding thirty are found.

Some idea of the prolificacy of the French Canadians may be gleaned from the fact that the 60,000 or so who were in Canada at the conquest in 1756, have grown until they now number at least 2,000,000, of whom many are living in the factory centres of the United States.

At the last census, 1891, the population was as follows:

MALES.	FEMALES,
Ontario 1,069,487	1,044,834
Quebec 744,141	744,394
Nova Scotia 227,093	223,303
New Brunswick 163,739	157,524
Manitoba 84,342	68,164
British Columbia 63,003	35,170
Prince Edward Island . 54,881	54,197
Territories 53,785	45,182
2,460,47 I	2,372,768
Total	4,843,239

In 1901 estimated 51/4 to 51/2 millions.

The English speaking provinces of Canada have educational systems that are equal to the best anywhere; in fact, education is universal. In Quebec very great progress is being made.

Education.

In Ontario educational matters are under the control of the Minister of Education, who is a member of the Cabinet, and of course goes out of office with his government. Educational affairs are thus brought into close contact with the people. A few years ago there was doubt whether thebringing of education into the political arena would be beneficial, there is now no doubt that the system is completely successful.

True that there have been some hot controversies, especially on the subject of the Bible in the schools and the control of the text books. Both of these controversies are now happily settled, the schools being opened with prayer and the reading of selections from the Bible. As to text books, the Minister examines text books and grants the use of such as he approves of, settling the price and the style of printing, binding, etc.

In Ontario, and also in Quebec, religious differences are protected by a Separate School system. Wherever in the midst of a Protestant community there are a sufficient number of Roman Catholics to maintain a school, a separate school is established, and the taxes payable by the users of such Separate school are paid over to the Separate Board. In like manner, Protestant communities in Roman Catholic centres are protected. In all of the Provinces having the Separate School system there are both Roman Catholic and Protestant Separate Schools.

Number	of	Schools	and	Scholars.
--------	----	---------	-----	-----------

		C	ost per
ONTARIO.	Schools.	Scholars.	Pupil.
Incl'ding Separate Schools	6,009	482,777	\$8.73
Separate Schools	340	41,620	7.26
Protestant Separate School	s 9	543	
High Schools	130	24,390	29.35
County Model Schools	60	1,288	
Normal Schools	3	458	
Normal College	I	176	
Kindergartens	105	10,693	
Teachers' Institutes	73	7,627 1	nem's
Night Schools	18	1,406	

Number of Schools and Scholars.

r	Schools. Scholars.
١.	British Columbia 257 17,189
3	Prince Edward Island . 581 21,852
6	Territories 426 16,754
-	Total for Canada of
'	Public Schools 17,558 947,208
	Other Schools 936 133,031
	Total expenditures on schools \$8,-
s	527,410, of which \$3,075,407 was paid
	by the Provincial governments and the

HIGHER EDUCATIONAL INSTITUTIONS.

Euc	dowment.	Prop'ty Assessed.	Income.	Students.
McGill Univ., Montreal \$2,	750,000	\$2,800,000	\$230,000	1,150
University of Toronto 1,	187,683	1,457,339	119,087	1,332
	750,000	325	35,000	475
Dalhousie Univ., Halifax	340,000	80,000	22,700	362
Queen's Univ., Kingston	400,000	125,000	46,400	635
Ottawa University	none	225,000	30,000	475
·	280,000	320,000	26,000	234
Bishop's Coll., Lennaville, Que.	196,275	106,280	21,150	165
King's Univ., Windsor, N. S.	155,000	250,000	9,000	30
N. B. Univ., Fredericton	8,884		12,000	80
Acadia Coll., Wolfville, N. S.	155,000	120,000	12,000	142
Laval Univ., Quebec	none	1,000,000	none	300
Mt. Allison College, N. B., .	117,500	120,000	22,500	175
Manitoba Univ., Winnipeg.	150,000	600,000	5,500	135
St. Francis Xavier Univ., An-				
tignish, N. S	50,000	100,000	11,000	IOI
McMaster Univ., Toronto				134
St. Joseph's Col. Memramcook, N.	B. none	50,000		165

Number of Schools and Scholars.

Schools.	Scholars.
Quebec, Roman Catholic 4908	275,159
" Protestant 979	38,635
" Schools of Art &	
Manufactures 7	821
" Schools of Agri-	
culture 4	116
New Brunswick 1778	63,338
Nova Scotia 2385	101,203
Manitoba	39,841

remainder raised by local taxation and from other sources.

The above are Universities. There are also 19 Colleges, 19 Classical Colleges, 8 Ladies' Colleges, and 5 Agricultural Colleges.

Libraries in Canada.

	Number.	No. of Vols.
Ontario	. 378	1,134,247
Quebec	• 39	531,356
Nova Scotia	. 26	97,521
New Brunswick	. 15	54 ,787

Libraries in Canada.

	Number.	No. of Vols.
Manitoba	8	34,730
British Columbia	IO	11,503
Prince Edward Island	1 3	8,528
Territories	I	2,150
Total		1,874,632

Religion.

There were, in 1891, date of the last census, 10,480 churches in Canada, an increase of 1828 in ten years. This is one church for every 461 inhabitants. The Roman Catholics have one church for every 1,115 of their adherents, Church of England one for every 386, Methodists one for 251, Presbyterians one for 428, and Baptists one for 240.

The number of adherents to each principal form of religion was:

	-						_			
Churc	h of	E	ng	gla	1110	1.				646,059
Metho	dist	3								847,765
Presby	teri	an	s							755,326
Baptis	its.		•						•	303,839
Other	Den	.011	iii	ıa	tio	ns				288,233

Total Protestant . . . 2,841,222

Roman Catholics in Quebec . 1,291,709
" other Provinces 700,308

Total Roman Catholic . 1,992,017

In 1811 the proportion of Roman Catholics to the total population was 41.43 per cent.; in 1891 it was 41.21 per cent.

The Roman Catholic Church has in Canada one cardinal, seven archbishops, twenty-three bishops, and about 1500 clergy.

The Church of England has two metropolitans and fifteen bishops and about 1000 clergy.

In all Canada there are 7,164 clergy- of other countries.

men, who increase at the rate of one per cent. per annum.

Temperance and Liquor Traffic.

Canada is one of the banner countries in the matter of temperance, the Province of Ontario leading the van. In that Province, the number of convictions for drunkenness have decreased by nearly one-half during the last fifteen years. This is owing not only to a very active campaign by the several temperance organizations, but also to the existence and thorough enforcement of a Liquor Licensing Law. Under this law the number of drinking places and the hours of sale have been rigorously reduced.

For instance, in the City of Toronto, which is not considered a temperance centre, and which has a population of 200,000, there are but 150 licenses issued, and all but one or two of these are genuine hotels; that is to say, there are no "saloons," or drinking places pure and simple, such as are to be found by the thousand in the large cities of the United States.

Trade of Canada.

At the beginning of the century the foreign trade of Canada was practically nothing. Even as late as 1834, the imports were but \$5,000,000, and her exports about the same.

For the year 1899 the figures were as follows:

Imports....\$162,764,308 Exports....158,896,905

Total trade . \$321,661,213

This amounts to about \$61 per head for the Canadian population, and it compares as follows with the total trade of other countries.

Total	trade ·	per l	head:
-------	---------	-------	-------

Canada		\$61.00
Germany		36.45
France		36.39
Austria		14.50
Russia	٠	4.93
Norway		49.72
Sweden		37•7 I
United States.		24.16
Great Britain.		90.23

The exports of Canada, arranged under their various heads, are as follows:

Products	of the Mine	\$13,568,585
6.6	Fisheries	9,951,304
66	Forest	28, 114, 295
٠6	Animal	48,024,814
6.	Agricultural	37,601,914
66	Manufactures	12,823,972
"	Miscellaneous	
<6	Coin and bullion	4,016,025

Total \$158,896,905

The imports were:

L'utiable articles	•	•		\$98,349,633
Free	•	•	•	59,709,541
Coin and bullion	,			4,705,134

There has of late, under the influence of the Preferential Tariff of 25 per cent.—since increased to 33 per cent.—granted to Great Britain in 1897, been a remarkable change in the trade of Canada. The preferential tariff was made not exactly in retaliation for the McKinley Tariff, which hit Canada in several tender places, but as a kind of declaration of independence against the United States, and as a sign that the attachment to the Mother Country was growing stronger than ever.

In 1868 the export trade of Canada divided itself in the following proportions:

With Great Britain.			. \$18,794,840
" United States.			
" Other countries	•	•	. 5,251,470
Total			. \$53,371,067

In 1899 the following change had taken place:

"	Great Britain. United States.			. 40,426,856
"	Other countries	٠	•	. 12,920,626 \$138,462,037

That is to say, where Britain once took one-third she now takes two-thirds; and where the United States once took much more than a half they now take much less than one-third.

The change in the import trade is similar but is less marked, the reason being that there are many articles of American manufacture indispensable in Canada, the corresponding British goods not being suitable.

The real significance of the above figures lies in the absolute demonstration which they furnish as to the uselessness of the United States attempting to exclude Canadian produce. The effect of the hostile American tariffs is that Canadian produce, instead of competing in the American markets, goes to England, where it meets the American produce on neutral ground, and there the price not only for England but the whole world is settled according to the merits and abundance of the article.

It is worthy of remark that under this dispensation the Canadian farmer is increasing his sales of certain articles at a very great rate. Among them are the following:

Canadian Exports to Britain

	1895.	1899.
Grain \$9	,307,916	\$24,294,388
Wheat flour	448,503	2,102,261
Butter	541,420	3,844,051
Cheese I	5,086,222	17,320,790
Bacon	3,798,341	10,407,654
Eggs	524,577	1,254,392
Provisions, all, 20	0,866,963	33,145,050
Wood & mfs. of 10	0,850,457	17,842,917

Banks and Banking in Canada.

There has grown up in Canada a banking and currency system which is at once safe and elastic. The volume of currency in circulation increases almost automatically as business needs it, and shrinks again as soon as business slackens. The banks are incorporated under a Dominion Act, which is overhanled and renewed every ten years. Every shareholder is liable, not only for the total value of the stock subscribed for, but also until twelve months after he has sold his stock for a further equal amount. This liability prevents speculation in bank shares, and while it perhaps reduces their market values, has a great steadying effect on business, and it so secures the circulation that there has not been a dollar lost to the holders of notes in Canada since this system came into vogue.

Banks which issue notes, can do so to the extent of their paid up capital, and they have to keep a reserve of — per cent. against them in legal tender, that is, in gold, silver, or notes of the Dominion Governmet. Be it noted that bank notes are not legal tender in Canada. Under this system, on a public demand occurring for money, the banks send it out, and when the demand is over it comes back. As the Canadian banks are not required, like American National banks, to deposit bonds against their currency, it is not the former's interest to force the notes out in slack seasons, as the notes when lying idle are costing them nothing; and consequently, on a demand springing up they do not have hurriedly to call in money just at the time when borrowers want it.

The growth of the banks in Canada has been astonishingly large, Here are the figures of the last 30 years:

	1868.	1898.
Capital paid up	\$30,507,447	\$62,571,920
Notes in circulation	9,350,646	37,873,934
Deposits	33,653,594	236,161,062
Discounts	52,299,050	223,806,320
Liabilities	45,144,854	281,076,656
Assets	79,860,976	370,583,991

The banks have country branches as follows:

In Ontar	io .					٠	٠	. 306
In Quebe	с.	•	•			•	•	. 117
In other j	prov	inc	es	•	•		٠	. 218
Total.								. 641

The total transactions of the Canadian chartered banks exceed \$1,500,000,000 per annum.

Post Office and Other Savings Banks.

Government savings banks under the management of the Finance Department exist in the maritime provinces, Manitoba and British Columbia. There are also the Post Office Savings banks, at which deposits of \$1 can be made, not to exceed \$3,000 in all, or \$1,000 in a year. Also, a large number of incorporated savings banks, which do a flourishing business. The number of the several kinds of savings banks is:

Government savings banks 25
Post office banks 814
Γhe deposits with these banks are:
With government sav-
ings banks \$15,630,181
With post office banks 34,480,938
With special savings
banks 15,482,100
With loan companies
savings banks 18,986,154

The number of depositors in the post office banks is 142,289, and the average amount to the credit of each is \$242.33.

Loan Companies.

The loan 'companies as well as the banks have made a surprising growth. There are now 95 of them, an increase of nearly treble in 25 years. The growth is illustrated in the following table:

1874.	1898.
Capital \$8,042,158	\$44,615,756
Reserve funds 1,336,462	10,317,455
Deposits 4,614,812	18,986,154
Debentures out 19,992	53,040,982
Loans 15,041,858	111,293,689
Total assets 16,229,407	145,378,910
Value of real estate	
under mortgage 35, 357, 682	210.070.017

Insurance Business.

In nothing is the growth of the business of a country better shown than in the volume of insurance issued. Canada shows up well in this respect.

For fire insurance the premiums received have increased as follows in 30 years:

```
Fire insurance premiums . 1869 $1,785,539
Fire insurance premiums . 1898 7,349,669
The amount of property insured was:
Property insured . . . . 1869 $188,359,809
Property insured . . . . 1898 895,382,846
```

In life insurance the growth is still more striking:

Tife in surance effected \$12,854,132 \$54,764,673
Life insurance in

force 35,680,082 368,545,985

In 1869, only one-seventh of the total business done was transacted with Canadian companies. In 1898, nearly two-thirds was placed with Canadian companies.

Railways.

The problems which faced the early railway builders in Canada were very serious. Population was sparse, money was scarce, the distances to be traversed were very great and the engineering difficulties were formidable and of a new class. Before railway building was commenced in Canada, there had been no such rivers as the St. Lawrence at Montreal met with, and the spanning of that immense stream by a tubular iron bridge—the first of its kind—was justly regarded as one of the modern wonders of the world.

To show the advance of modern science, it is only necessary to say that a few months ago this bridge was wholly rebuilt as to its superstructure, and the world outside of engineering circles scarcely heard of it. So, also, with the railway suspension bridge at Niagara Falls. It has recently been completely rebuilt, the largest steel arch in the world having been substituted for it, and the change creates only a ripple of notice.

Canada possesses three large railway systems.

The Grand Trunk system.

The Canadian Pacific system.

The Intercolonial system.

The first was constructed by private companies which received some governmental aid; the second was built with

funds and on credit of subsidies given by the government. The third was constructed by and is still operated by the government.

The railway mileage is as follows:

				MILES.
Canadian Pacific	•			6,301
Grand Trunk	•	•		3, 162
Intercolonial				
Other railways	•	•		5,933
Electric roads	•			114
Bridges and tunnels.	•	•		5
Total	٠	٠		16,870
There has been give	n	pe	r	mile by
		-		

the public to these railways in the following proportions:

By Dominion government.	\$8,981
By provincial governments	1,867
By municipalities	928

Total \$11,776

In addition there has been put into them

Ordinary share capital \$266,669,857 Preference 111,481,933 Bonds 354,946,866

and with the government and the total cost of the Canadian railways has been close on \$1,000,000,000.

The train mileage in 1898 was 50,-688,283 miles.

Number of passengers, 18,444,049. Tons of freight, 28,785,903. Earnings, \$59,715,105. Working expenses, \$39,137,549. The mileage in each province is

										MILES.
Ontario	•	•	•	•	•	•	•	•	٠	6,674
Quebec										
New Br	1111	SW	vic	k	•	•	•	•	٠	1,447
Nova Sc										
Prince E	dv	va	rd	Is	la	nd	٠	•	•	210
Manitob	a	•				•		•	•	1,621

British Columbia 8	92
Constitution of the Consti	
Total 16,8	370
Compared with the United State	es the
compared with the Office State	.5 the

railways of Canada show this:

Cost per mile \$61,409 Receipts per mile 7,050	\$55,797 3,572
Passengers killed per million car-	
ried 0.35 Passengers injured	0.27
per million car-	
ried 5.61	3.96

In 1869 the Canadian railways carried 1.34 passengers and 1.46 tons of freight per head of the population; in 1898, 3.51 and 5.48 respectively; showing that the business done per head of the population had nearly trebled in the time.

Canadian Canal System.

The beginning of the gigantic Canadian canal system dates back more than 150 years. As long ago, the Hudson Bay Company constructed of timber a lock at Sault Ste. Marie for the purpose of passing their small vessels to the northwest. This lock was 40x10 feet. It had been almost forgotten when its remains were uncovered during the progress of some improvements in the year 1900. Alongside it is the new Canadian lock nearly one thousand feet long and on the United States side are locks still larger in area though not in length.

Soon after Upper Canada was constituted, the legislature began appropriating money for improvement of the waterways. In 1841, when the population of the Province was only 450,000,

the Legislature voted \$2,500,000 for the ; sages were sent, and 2677 telegraph construction of canals to overcome the St. Lawrence rapids. Soon afterwards the Welland Canal, overcoming Niagara, was entered upon. A lock 150 feet long was built. This, by 1875, had become totally inadequate, as well as had the St. Lawrence system, and an enlargement was entered upon which was not completed until 1900, when the last link, the Sonlanges canal was finished, giving a depth of fourteen feet from tidewater to the head of Lake Superior.

The following table shows the dimensions of the existing canals, commencing at tidewater:

			Dimensi	
		ise No.	of of Lock	S
		eer. Loc	KS. FCCL.	
Lacline 8	$3\frac{1}{2}$ 1	8	5	
Sonlanges 14	. 8.	21/2 4	27 0x.	45
Cornwall 11	ı 4	.8 6	5 "	
Farran's Point	í.	31/2 1	x008	45
Rapide Flat . ;	$3\frac{2}{3}$ 1	1 1/2 :	2 270q	45
Galops	7½ I	51/2	3 "	
Welland 20	63/4 32	63/4 20	6 "	
Sault Ste Marie	1 1/8 I	8 :	1 900x	60

The Rideau Canal system, which gives an internal connection between the St. Lawrence and Ottawa, consists of six canals, in all 291/4 miles long, with 44 locks.

The total expenditure on the canals has been \$92,000,000, of which \$20,-000,000 was spent before confederation. The revenue averages \$377,477.

Telegraphs and Telephones.

As is natural with a highly intelligent and enterprising but scattered people, the Canadians lead the world in the extent of their possessions in the way of telegraphs. There are in the country 30,084 miles of telegraph line, over which, in 1899, 4,786,101 mes- duced in 1899 was \$48,438,247.

offices.

Canada compares as follows with the leading countries:

	Miles of Line.	Offices.	Persons to each Office.
Canada	40,084	2,667	1,991
United States	189,856	22,285	3,410
Great Britain	43,803	10,816	3,750
France	64,622	11,769	3,273
Germany	87,513	22,150	2,842
Russia	78,396	4,623	22,970

Of telephones, Canada has 43,902; 82,219 miles of wire, over which 114,-953,381 messages were sent.

Mineral Production of Canada.

There has been of late great activity in mineral development. Some millions have been spent in exploratory and development work, and it has become evident that Canada needs only population and a market to take her place among the leading mineral producing nations. This table shows the extent of the production and its rapid increase.

Minerals Produced.

	1887.	1899.
Copper	. \$ 366,798	\$2,655,319
Gold	. 1,237,804	21,049,730
Iron Ore	. 146,917	248,372
Lead	. 9,126	977,250
Nickel	. none	2,067,840
Silver	. 341,645	1,834,371
Asbestos	. 226,976	483,299
Coal	. 4,388,206	9,040,058
Graphite	. 2,400	16,179
Gypsum	. 157,277	257, 329
Mica	. 29,816	163,000
Petroleum .	. 556,708	1,202,020

The total value of the minerals pro-

INTELLECTUAL DEVELOPMENT OF CANADA.

COUNTRY in its political infancy, which was the position of Canada until nearly the middle of the 19th Century, could hardly be expected to have put forth a distinctively national literature. Even now, when the throbbings of the new Canadian nationality are strong and healthful, there are certain peculiarities in the position of the country which tend to hinder the attainment of a full national literary life. Canada is a well-educated, sparsely populated, comparatively poor country-however rich in undeveloped resources-lying alongside of the richest country in the world, and only a week distant from the great Mother Land. The Canadian reader has a wide field. The writings of British and American authors are equally acceptable to him, with those of his own country. Canada is by far the best foreign market that American booksellers possess, taking nearly one-half of the total exportation of American books; while the import of British, French and German books into Canada is very large.

A Great Consuming Market.

Such an inflow of outside literature operates to the development of the national intellect along very broad lines; but it is a distinct detriment to the fortunes of the native author. Then there have been in the way serious copyright difficulties perhaps not wholly overcome.

The effect of the state of affairs which has governed during the last few years is seen in the fact that while

Canada has given birth to several authors of great and growing renown, the best work of many of them has been done abroad. Then the early days of Canada were not favorable to literary activity. The life of the pioneers was too strenuous and communication too difficult to allow much devotion to letters.

The first generation of their children received only a modest education, because of isolation and because of the urgent need by the parents of the children's help. The same things which tended to keep back literary development, bred a sturdy self-reliance and independence of character, and as soon as population increased so that schools became possible a new era set in and intellectual progress became rapid in spite of the many and great disadvantages.

The Work of the Press.

Perhaps the fierce political discussions of the early days of Canada were the greatest stimulus to mental activity. The Canadians have always had fine Parliamentary speakers. The fine old British precedents as to propriety of debate have been closely followed, and there has always been a great respect for constitutional argument. The speeches in Parliament and on the stump were well reported and diligently read in thousands of homes. The average Canadian farmer is a remarkably sound politician. He is as a rule far better informed on political affairs than is the dweller in cities.

The press that supplied him his poli-

tics was, as long as sixty years ago, quite as good as anything else in the world when the poverty of the field is taken into account. It is true that the press was, as it is to day, intensely partisan, but to that may be ascribed a great deal of the activity and alertness that characterizes the people. If the people were fed on a partisan diet, the diet itself was rich and stimulating and bred a certain positiveness, the marks of which may endure for generations to come.

The Literary Future.

While it may readily be admitted that Canada has made more progress in cultivating her fields than in developing her mind, it must also be admitted that this was inevitable under the circumstances. But nothing is more certain than that with wealth and leisure will come the literary graces. Canada really intends to be a power in the world, not only in the tables of imports and exports, but in the swaying of the minds of men. In the order of nature physical development must precede mental. Muscle and bone go before brain, and bread and butter must be considered before the muses.

The Canadian people is still too young and too busy to have much of a record of intellectual achievement. But be it remembered that there is in them the blood of the most intellectual races in the world. Their ancestry is all right and their climate is such as to enforce mental activity. They are not the people to be satisfied with purely material greatness. Such progress as they have already made in the arts must be taken with all allowances for the circumstances. And when all these

allowances are made it must be admitted that the achievement has been wholly creditable.

Having regard for what has been done, it may confidently be predicted that the time will come when Canadian books will be as much sought after as is Canadian bacon; when Canadian thought will be as widespread as are Canadian ships; and Canadian literature as stately a growth as the Canadian forest.

The World of Letters.

Let us see what Canada has done in the world of letters. Let us take the more serious studies first.

Historians.

The most important historical work produced in Canada has been Dr. Kingsford's "History of Canada," in ten volumes. It is a thoroughly exhaustive work, bringing down the history to the time of the Union in 1841. Dr. Kingsford died just as his last volume issued from the press, leaving a fine field for some equally painstaking successor to continue his work. The only history at all comparable with Kingsford's is Garneau's, which French and British critics pronounced a masterpiece, and Dr. R. Christie's six volume history of Lower Canada.

John M. McMullen's "History of Canada" is another very careful work, as is also H. H. Miles' "History of Canada Under the French Regime."

There is also, edited by J. Castell Hopkins, a five-volume "Cyclopedia of Canadian History and Politics," which needs only enlargement to become a future standard work on Canadian history. Dr. W. H. Withrow, G. Mer-

cer Adam and G. C. R. Tuttle have done some important historical work; so has Prof. Bryce, whose "History of the Canadian People," and "History of the Hudson Bay Company," are of very great value.

Among other historical writers are Alexander Begg, J. B. Calkin, Duncan Campbell, Dr. Canniff, Abbe Casgrain, W. H. P. Clement, Lady J. D. Edgar, Abbe Faillon, Donald Gunn, J. Hannay, Gerald Hart, R. B. Hill, Prof. Hind, Dr. J. G. Hodgins, Thomas Hodgins, Q. C., H. Larue, W. Leggo, Sir James Lemoine, B. Murdoch, D. B. Read, Q. C., E. Reveillaud, E. Richard, Major Richardson, C.G.D. Roberts, C. Roger, Rev. E. Ryerson, H. B. Small, G. Auchinlech, W. Smith, W. H. Smith, Geo. Stewart, Rev. E. R. Stimson, Benjamin Sulte, David Thompson, the Misses Lizars and L. R. Turcotte.

Sir John Bourinot, Clerk of the House of Commons, has produced some good historical work. J. C. Dent's two books on "The Upper Canadian Rebellion and Canada Since the Union," are remarkable exhibitions of painstaking research and luminous exposition.

Last among the historical works may be mentioned the "University of Toronto Studies in History," edited by Prof. Wrong and H. H. Langton. These are very able publications devoted principally to reviewing works on Canadian History.

British and Foreign Authors in Canada.

First among the living historical and political writers in Canada must be placed Dr. Goldwin Smith who, having passed in Canada more than half of the

productive part of his life, may be claimed as a Canadian, at least to the same extent that Agassiz and some other foreign-born writers are claimed as Americans. Dr. Goldwin Smith has been a most prolific author. His writings have been largely devoted to showing the extreme desirability from a material point of view of the closest possible union between the United States and Canada. In the meantime, all the public acts of the United States toward Canada have shown a deepseated hostility and have tended to separate the two nations instead of to join them, and the countries have indubitably been growing farther apart during the last quarter century.

Political History.

As well as his writings on Canadian questions and much purely literary work, Dr. Goldwin Smith has written a "Political History of the United States," in which he sometimes takes the position of a very candid friend; and a "Political History of the United Kingdom," which will probably be held to be his greatest work, as it embodies the results of a long life-time of keen study and is an entertaining as well as a deeply instructive work.

Another eminent English-born writer who resided a long time in Canada and produced some of her work here was Mrs. Anna Jameson, author of "Sacred and Legendary Art." Her book, "Winter Studies and Summer Rambles in Canada," is one of the most pleasing works on Canadian home life.

Then there was the talented Strickland family. Out of six daughters, five attained literary eminence. Two of them, Susannah Moodie and and Cath-

erine Parr Traill, came to Canada when the century was quite young and the latter died only a year or two ago, having nearly rounded out her hundred years of life. As long ago as 1825 these two ladies had made their mark in literature, and one of Mrs. Traill's best works, "Pearls and Pebbles," was published as lately as 1805, when she was considerably over 90 years old. She also wrote "Backwoods of Canada," and "Forest Trees and Wild Flowers." Her sister's most famous works are "Roughing It in the Bush" and "Flora Lyndsay." Colonel Strickland another member of the same family also settled in Canada and did much excellent literary work.

Any pronouncement on the progress of Canadian historical literature during the century would be very incomplete if it omitted to acknowledge the splendid work done by Francis Parkman and by other careful American historians as John Gilmary Shea, W. L. Stone and Justin Winsor. Especially, it may be said of Parkman that he has linked his name forever with that of Canada in his imperishable volumes.

Constitutional Writers.

Canada has done some exceedingly good work in this field. Alpheus Todd's two works on Parliamentary government are valued wherever there are deliberative bodies. Sir John Bourinot's books on Parliamentary procedure are accepted as authoritative everywhere. A. H. Lefroy's book on "Legislative Power in Canada," is a most able treatise on the constitution. Other constitutional writers are Clement, Houston, Travis, O'Sullivan, Hon. David Mills, etc.

Scientific Writers.

Canada has made many valuable contributions to the literature of science. Among them may be mentioned Sir Daniel Wilson's works on Anthropo!ogy; Dr. McCaul's on Archæology; Sir W. E. Logan's on Geology, and Prof. McCurdy's on Biblical Archæology. Sir W. E. Logan was the first Director of the Canadian Geological Survey. He made some epoch-marking discoveries -some that lie at the foundation of modern geological science. He was accompanied in the same field by Dr. Sterry Hunt, Messrs. Billings, Murray, Richardson, Vennor and others, and his work was continued by Dr. Selwyn, Robert Bell, J. F. Whiteaves, J. W. Spencer, B. J. Harrington, G. C. Hoffman and many others whose names are familiar to the readers of scientific papers. The present director of the Survey is Dr. G. M. Dawson, C. M. G., who has made many valuable additions to geological science.

Prominent among the scientific writers of the time was Sir J. W. Dawson who, thirty years ago, was very much alone in combatting the then rampant materialistic tone which the discussion on Evolution was taking. He wrote many very able books on the line of what has been called Christian Evolution. He endeavored to deliver his favorite science, geology, from the bald materialistic speculations of the time and it is in no small degree owing to his efforts that there may be said to be to-day no school of science which believes in the non-existence of a First Cause.

In the field of botany Prof. Macoun has done much able and lasting work, and as an explorer Mr. J. B. Tyrrell is

doing work in the Far North of Canada no less important than that achieved by Sir Alexander Mackenzie in the last years of the Eighteenth Century, and by Sir Geo. Simpson in the early part of the 19th. Mr. Warburton Pike also has done some intrepid exploring work and about it has written some very entertaining and modest books. The late J. G. Romanes, an eminent scientific writer who, while accepting modern science, kept his hold on his faith, was a Canadian, as are also Prof. Simon Newcomb, the eminent astronomer, and Dr. J. G. Schurman, President of Cornell University.

The first, and some folk are still bold enough to say the best, of the distinctively American humorists was a thoroughbred Nova Scotian. "Sam Slick" —or as he was known in the flesh, Judge Haliburton, of Halifax, is still excellent reading, full of racy humor and keen satire. Haliburton wrote many other books which exercised influence in their day, but he will live as the author of the Yankee Clockmaker. Hundreds of humorists have come and gone, and will come and go, but Sam Slick is still to the fore. It is to be noted too that several other humorists who have achieved vogue in the United States were Canadians, for instance, Robert Barr (Luke Sharp); Bobert Burdette; Mayor Lewis (M. Quad); G. T. Lanigan and many smaller lights.

Poets and Poetry.

The later years of the century in Canada have been brightened by the presence of a singularly able coterie of young lyricists. Chief among them were W. W. Campbell, Bliss Carman. C. G. D. Roberts and Arch. Lampman,

now dead. The works of all these young poets show delicacy of feeling, keen inspiration and wonderful facility Among Campbell's of expression. works are "Lake Lyrics," "The Dread Voyage," "Mordred and Hildebrand" and "Beyond the Hills of Dream." Carman's principal works are "Low Tide on Grand Pre," "By the Aurelian Wall" and "Ballads of Lost Haven." Roberts' are, "New York Nocturnes," "Songs of the Common Day," "In Divers Tones" and "The Work of the Native.'' The works of Lampman have been gathered into a sumptuous memorial volume.

An entirely new field has been opened by Mr. W. H. Drummond, who in his "Habitant" poems gives us an insight into the life of the French Canadian peasantry—a charming book, racy of the soil, sympathetic and strong.

Among a long list of Canadian poets the following are worthy of note: Jean Blewett, Rev. E. H. Dewart, Sir. J. D. Edgar, C. E. Jakeway, Wm. James, Pauline Johnson, Marie Jonssaye, R. H. Kernighan, Evan MacColl, Miss Maclar, Alex. MacLachlan, Charles Mair, J. R. Ramsay, Carroll Ryan, Charles Sangster, Charles Heavysege, F. G. Scott, Mrs. Harrison, Rev. W. W. Smith, R. G. Starke, J. S. Thomson, A. Weir, Ethelwyn Wetherald, G. W. Wicksteed.

General Literature.

Among the writers of solider material there is Principal Grant of Queen's University, by birth a Nova Scotian, a fine example of the scholar who keeps abreast of his times, and in touch with living issues. His book "Ocean to Ocean" is a graphic description of a

trans-continental journey in ante-Canadian Pacific days. Along with him may be mentioned Dr. Ryerson, first Superintendent of Education in Upper Canada, who wrote a splendid book on "The United Empire Loyalists" and an autobiography.

Let it not be forgotten that if the cheapness of literature is one of the greatest blessings of the age, that cheapness is due to two Canadians more than to any other two persons; for it was George Munro, with his "Seaside Library," and J. W. Lovell with his "Lovell's Library"—both Canadians—who broke down antiquated bookselling arrangements which hampered alike author and public.

Fiction-Historical and Other.

The fiction writers of Canada have turned to historical subjects as naturally as they turned to their mother's milk. It was inevitable that they should do so. Canadian history is essentially attractive, inspiring and fruitful, and when we compare the work of our later writers with that of their American and British contemporaries it will be seen at a glance what a stride Canadian literature is making.

Sixty or seventy years ago, some notable contributions to historical fiction were made by Major Richardson, who is now principally known as the author of a very good history of the War of 1812, but whose "Wacousta," "The Two Brothers" and "The Guardsman" were extremely popular in their day.

In more recent fiction Canada has made a mark with Wm. Kirby's "Le Chien D'Or," published in 1877. This book may almost be said to have revived the fashion for novels dealing

with the picturesque features of history. Had it been published twenty years later and pitched in a little more sensational strain it would easily have distanced some of "the most popular novels" which now run into the hundreds of thousands of copies.

Mrs. Mary Hartwell Catherwood has recalled some striking pages of Canadian history in her "Romance of Dollard," and her stories of Mackinac. She is an industrious scholar and has admirable skill, together with strong enthusiasm for Canadian subjects.

Stories of Western Life.

Mr. Gilbert Parker has done much for the good repute of the literature of his native land. Not only has he convinced Canadians that there are mines of literary wealth in their history, but he has opened the eyes of all the world to the richness of those mines. His first sprightly stories of Northwestern life had prepared the way for the more serious works, such as "The Seats of the Mighty" and "The Battle of the Strong," which fairly took the critics by storm, and were by many adjudged to be the best novels of their respective years.

As well as the two books above mentioned, Mr. Parker has written "The Trail of the Sword," "An Adventurer of the North," "The Trespasser," "Translation of a Savage," "Mrs. Falchion," and some others, as well as several volumes of bright and artistic short stories. He ranges over a wide field.

Though intensely Canadian in fee ing, he is a thorough cosmopolitan in writing, and whether his scene is faid on the breezy prairies, on the glorang

Nile, or in a London drawing room, he is equally at home. He is well-equipped mentally and physically for many years to come. We may fairly hope that excellent as has been his work there is better yet to come.

Charles G. D. Roberts is another Canadian who has broken into the world's charmed circle. He has done much serious as well as some light work. His "History of Canada" will take its place among the standard works. A series of novels illustrating Acadia, "The Forge in the Forest," "A Sister to Evangeline," and several volumes of short stories are his principal contributions to fiction. As a poet he has made a shining name.

Robert Barr is an expatriated Canadian for whom, though, misunderstanding his native country, he has lately said some very spiteful things of her, no Canadian feels anything but respect and affection. His pen is facile—perhaps too facile, but for that his early newspaper training is to be blamed—but his matter is strong and its tendency is healthful. His best work is on a Canadian subject, "In the Midst of Alarms," and he has lately struck a vein of mediæval romance—"Tekla" and "The Strong Arm" which seems to suit him very well.

Anglo-Indian Author.

Sara Jeannette Duncan (Mrs. Cotes) is a Canadian bred Anglo-Indian author who has made a deep mark in light literature. She has keen perceptions, her style is vivacious and occasionally she uses the knife in so deft a way that even her victim must enjoy the insinuating stab. "The Adventures of an American Girl in London," with its

sequel, "A Voyage of Consolation," are exceedingly bright books. "A Daughter of To-day," "Adventures of a Mem-Sahib" and "His Honor and a Lady" are more ambitious works and show her at her best.

Grant Allen was born and educated in Canada and never ceased to consider himself a Canadian, though his literary work was done in London. He was a simple phenomenon in his faculty of mastering abstruse problems of science and presenting them in such a form that the ordinary unlearned reader could enjoy and profit by them. His scientific writings are immensely popular.

As a fiction writer, while he temporarily went off after sensation and wrote some sex-novels which had a great run, he executed much other work that was of a wholesome tendency. He will principally be remembered, however, by his solider works, such as "The Colour Sense," "Evolutionist at Large," "Flowers and Their Pedigrees," "Science in Arcady," etc.

Ideal Fiction.

Among the newer Canadian writers is Rev. W. C. Gordon, who under the pseudonym of Ralph Connor has put forth "Black Rock" and "The Sky Pilot." If any one can imagine Bret Harte's stories purged of every thing objectionable and infused with a thoroughly Christian spirit, he would come pretty near to comprehending Ralph Connor. The earnestness of Mr. Gordon's stories is unmistakable. He never has to point his moral—the story itself does that irresistibly. He is probably achieving more good than any other contemporary fictionist. His writings, though thoroughly imbued with the religious

spirit, never descend to the mawkish, and though they touch the innermost feelings of the heart, are never repellantly sentimental. He is one of the best living types of a thoroughly manly Christian, and the more work that can be got out of him the better for the world at large.

Juvenile Literature.

In the field of juvenile literature Canada has J. Macdonald Oxley who has written much. His work is somewhat in Henty's preserves and it loses nothing in comparison with that prolific Irishman's books.

Miss Lily Dougall, of Montreal, is a writer of serious fiction well known outside of the Dominion. Her principal works are "Beggars All," "What Necessity Knows," "The Zeitgeist," and "The Mormon Prophet."

William McLennan, of Montreal, has written several historical novels which have attained wide circulation.

Among other Canadian writers of whom space forbids to give more than a brief mention are Mrs. "Seranus" Harrison, whose "Forest of Bourg-Marie" is a delightful tale of French-Canadian life. Mr. T. G. Marquis' "Marguerite de Roberval" turns on a very sad incident and converts it into a delightful book. Mrs. Joanna E. Wood, who has been described as the Miss Wilkins of Ontario, has written several excellent books describing Ontario life.

In the same vein is a recent notable book, "House of Glass," by Wallace Lloyd (Dr. Alger, M.D.). Mr. W. A. Fraser, who has been an intimate friend of Kipling, has imbibed enough of his spirit to enable him to write very

attractively of the Canadian animal world. Mrs. Henshaw and Clive Phillips-Wolley of British Columbia, Mr. Walsh of Montreal, and Miss Marshall Saunders of Halifax are a few out of many who ought to be written of in terms of highest commendation, but this list has to be brought to a close.

It would be most unjust though were there no reference made to a group of short story writers who have done splendid work. Mr. E. W. Thomson, now of the "Youth's Companion," has published three volumes of short stories that will compare favorably with anything else of the same class. He is a brilliant writer, full of information and fancy and abounding in nervous strength. He is fully equal to more sustained work, and ought to essay it.

Works on Animals.

Another brilliant young Canadian is Ernest Seton Thompson whose "Wild Animals I Have Known," "Wahb," and "The Trail of the Sandhill Stag" have struck a sympathetic chord in the heart of every animal-lover. Mr. Thompson's insight into animal nature is profound. As well as a writer, he is an extraordinarily good artist and illustrates his own works which deserve to be on the shelf with Burroughs, Thoreau, White of Selborne and the ferwery few, others to whom this precious gift of knowledge of animals is confined.

Out of a great number of successful short story writers may be named Stinson Jarvis, Miss MacMurchy, Duncan Scott, F. G. Scott, Maud Ogilvy, Stuart Livingstone, etc.





POPULATION

OF

CITIES, TOWNS AND VILLAGES

Having 5000 or more Inhabitants in 1900, Compared with the Enumeration of 1890



ALABAMA.	1	COLORADO.		FLORIDA.	
Anniston 9,695	1890. 9,998	1900. Colorado Spr'gs. 21,085	1890. 11,140	Jacksonville 28,429	1890. 17.201
Anniston 9,695 Bessemer 6,358	4,544	Cripple Creek 10,147		Key West 17.114	18,080
Birmingham, 38,415	26,178	Denver133,859		Pensacola 17,747	11,750
Florence 6,478	6,012	Pueblo 28,157 Triuidad 5,345	24,558 5,523	Tampa 15,839	5,532
Huntsville 8,068 Mobile 38,469	7,995 31,076	CONNECTICUT.	0,020	GEORGIA.	
Montgomery 30.346	21,883	Ausonia 12,681	10.342	Americus 7,674	6,398
Selma 8,713	7,622	Branford 5,706	4,460	Athens 10,245	8,639 65,533
Tuscaloosa 5,094	4,215	Bridgeport 70,996 Bristol 6,286	48.886	Atlanta 89,872 Augusta 39,441	33,300
Nome City 12,486		Danbury 16,537	16,552	Brunswick 9,081	8,459
ARIZONA.		Derby 7,930	5,969	Columbus 17.614	17,303
Phœniz 5,544	3,152	East Hartford. 6,406	4,455	Griffin 6,857 Macon 23,272	4,50 3 22,74 6
Tucson 7,531	5,150	Greenwich 12,172 Groton 5,962	10,131 5,539	Rome 7,291	6.957
ARKANSAS. Fort Smith 11,587	11.311	Hartford 79,850	53,230	Savannah 54.244	43.189
tlelena 5,550	5,189	Killingly 6,835	7,027	Thomasville 5,322 Valdosta 5,613	5.514 2.854
Hot Springs 9,973	8,086	Manchester 10,601 Meriden 24,296	8,222 21,652	Waycross 5,919	3,364
Little Rock 38 307	25 874	Middletown 9,589	9.013	HAWAII.	
Pine Bluffs 11,496	9,952	Naugatuck 10,541	6,218	Honolulu 39,306	22,907
CALIFORNIA. Alameda 16,464	11,165	New Britain 25,998 New Haven108.027	16,519 81,298	IDAHO.	
Berkeley 13,214	5.101	New London 17,548	13,757		2,311
Etna 7,327	4,858	Norwalk 6,125	(*).	ILLINOIS.	-,
Fresno 12,470	10,81%	Orange 6,995	4.537	Alton 14,210	10,294
Los Angeles102,479 Oakland66,960	50,395 48,682	Putnam 6,667 Rockville 7,287	7,772	Aurora 24,147	19,688
Pasadena 9.117	4,882	Southington 5.890	5.501	Belleville 17,484	15,361
Pomona 5,526	3,634	South Norwalk. 6,591	(*) 15,700	Belvidere 6,937 Bloomington 23,286	3,867 20,484
Riverside 7,973 Sacramento 29,282	4,683 26,386	Stamford 15 997 Stonington 8,540	7.184		3,329
San Bernardino. 6,150	4,012	Torrington 8,360	4,283	Calro 12.566	10.324
San Diego 17,700	16,159	Wallingford 9,001	6,584	Canton 6,564 Centralia 6.721	5,6 04 4,7 63
San Francisco. 342,782 San Jose 21,500	18,060	Waterbury 45,859 West Haven 5,247	28,646 2,697		5,839
Santa Barbara. 6,587	5,864	Willimantic 8.937	8,648	Charleston 5,488	4.135
Santa Cruz 5.659	5.59€	Winsted 6,804		Chicago1698575 Chicago Heights 5,100	1099850
Santa Rosa 6,673 Stockton 17,506	5,220 14,424		rted.	Danville 16,354	11.491
Vallejo 7,965	6 7.17	DELAWARE.		Decatnr 20.754	16,841
Boulder , 6,150	3,330	Wilmington 76,508	61,431	DeKalb 5,904	2,579

4000	1890.	,	900. 1890	i i		1900.	1500
1900.	2000.				Dalatanana en		1599.
Dixon	5,161.	Burlington 23,	,201 22,56	1 60	Baltimore50	18,957	434.439
The take Touris 20 CEE	15 160	Cedar Falls 5. Cedar Rapids 25,	,319 3,45	COLF	Cambridge 1	E 737	
East St. Louis 29,000	15,169	Cedar Fairs 5,	,019 0,40	19 6	Jampiruge	0,141	4,192
Elgin 22,433	17,823	Cedar Rapids 25.	,656 18,02	201 C	Sumberland 1	17.128	12,729
Talent	211000	() = 40 = = ()]	050 0 00	0 1	Anadoniole	0.000	6,100
Evanston 19,259		Centervine 5,	,256 $3,66$	1 60	rederick	0,255	8.193
Freeport 13,258	10,189	Centerville 5, Clinton 22,	,698 13,61	9 4	Prostburg	5 271	3 804
Trechort Interes	20,200	Council Diver of	000 01 45	7 4 E	Jacobatemn 1	0,201	10,001
Gaiena 5,005	5,63	Council Bluffs 25, Creston 7, Davenport 35,	,802 21,47 ,752 7,20	14 1	Frederick Frostburg	lo,591	10,118
Galesburg . 18,007 Harvey 5,395 Jacksonville 15,078	15,265	f'reston 7	759 7 90	M. E			
Garesburg . 10,001	10,202	Creston	, 104		MASSACHUS	ELL	S.
Harvey 5.395		Davenport 35.	,254 26,87	(2)	Adams 1	1 124	
leulenemaille 15 079	19 025	Des Moines 62,	139 50,09		- Campo	11,104	9,213
Jacksonville 10,010	12,935	Ties mornes 02,	,100 00,00		Amesbury	9.413	9,798
Tollet 29 353	23,264	Dubuque \dots 36.	,297 30,33	111 4	Amnough	= 1,90	
10.505	0 00:	Blant Dadge 10	1.0 40		Amnerst	0,020	4,512
Joliet 29,353 Kankakee 13,595	9,028	Dubuque 36, Fort Dodge 12.	.1c2 4,8	1 2	Audover	6 813	6,142
Kewanee 8,382 LaSalle 10,446	4,56	Fort Madison 9, Iowa City 7, Keokuk 14,	,278 7,90)11	Aminaton	0,020	
10 440	0 055	Tomas Citar 7	007 7:0	6 4	allington	8,003	5,629
LaSaile 10,446	9,855	Towa City	,987 7,0	rol 3	Athot	7 061	6,319
Lincoln 8,962	6,725	Keokuk 14.	,641 14,10	11 7	Attlohone	11,005	
1311101111 1 0,002	F 011	Minus La Minus 11	F 4 4 6 0	1714	Arrington Athor	11,335	7, 577
Litchfield 5,918	5,811	Marshalltown 11,	,544 8,9	14	Beverly 1	12 224	10,821
Macomb 5,375 Mattoon 9,622	4,052	Mason City 6,			Dlackman	5,001	
Marcomo	2,000	Madou City		2 1 1 4	Blackstone	5,721	6,138
Mattoon 9,622	6,833	Muscatine 14.	.073 11,4	04 I I	Boston56	60 809	118 177
Moline 17,248	12,000	Oalwain 5	149 85				
11011116 11,270	22,000	Octubil	,110		Braintree	5,981	4,848
Monmouth 7,460	5,931	Uskaioosa 9.	0,212 6,5	1 80	Brockton 4	40 063	27,294
Monmouth 7,460 Mount Vernon 5,216	5,936 3,23	Oelwein 5 Oskaloosa 9 Ottumwa 18 Siana Gitta 18	3,197 14,0		Diochton,	10,000	
Modul Vernou 5,210	0,200	Ottumwa 10.	1131 111,0	1	Brookline 1 Cambildge 9	19.935	12,103
MILLED VSDOLO 0.403	3,880	Sioux City 33	37,8	Jt 16	'amhidaa 0	11 400	70.028
Ottawa 10,588	9,985	Waterloo 12		7417	Sumbituge	01,000	
Uttawa 10,000	3,301	Wateriou 12	,,000 0,0	121(Cheisea 3	34.072	27,909
Pana 5,530	5,077	KANSAS.		- 16	hloopoo	10 167	14,050
Bania £ 105	4,990			! >	Chlcopee 1	19,101	
Paris 6,105		Argentine 5	,878 4,7 3	321 (Clinton 1	13,667	10,424
Pekin 8.420	6,347			17 1			
Peoria 56,100	41,024	Argonia 6	3,140 8,3	TI I	Concord		4,427
reoria 00,100	41,024	Atchison 15	1.722 13.9	63 I I	Dana 1	13.067	10,424
Peru 6.863	5.520	Rmpovio	2 222 7 5	51 1	Danvare	8 549	
()uinon 26 050		Emporia 8 Fort Scott 10	3,223 7,5	OT 1	Danvers	0,042	7.454
Quility 30,232	31.49	Fort Scott 10	0,322 11,9	1611	Dedham	7.457	7,123
Peru 6,863 Quincy 36,252 Rockford 31,051	23,584	Galana	155 9 4	neli	Danvers Dedham Easthampton	5 600	1 205
Dools laland 10 402	12 004	Galena 10	1,155 $2,4$	100	Easthampton	0,003	4,395
ROCK ISIAHU 19,495	13.634	Hutchinson 9	9,379 8,6	82 1	Everett 2	24.336	11,068
Springfield 34 159	24,96		701 17	oct:			
0 111 21 21 21	3.837	Iola 5	5,791 1,7	0011	Fall River10	04,803	74,398
Spring variey 6,214	9.09.	Kansas City 51	L,418 38,3	16!!	Fitchburg 3	31.531	22,037
Spring Valley 6,214 Sterling 6,309 Streator 14,079	5,824	Tanabab Orty da	0.00	07 3	C	11 200	
14.000	11 414	Lawrence 10	0,862 9,9	3111	Framingham 1	11,302	9,239
Streator 14,079	11,414	Leavenworth 20	0,735 19,7	6811	Franklin	5.017	4,831
Urbana 5,728	3,511			0=14	Franklin	10,010	
010dHd		Newton 6	5,208 $5,6$	Ua t	Garaner	10,813	8,424
Waukegan 9,426	4,915	Ottawa 6		48 6	Gloucester 2	26 121	24,651
INDIANA.		December 7	7 000 0 0				
		Parsons 7	7,682 6,7	36 (Gr't Barrington.	0,854	4,612
Alexandria 7,221	715	Pittsburg 10	0,112 6,6	97 6	Greenfield Haverhill 3	7 927	5,252
4 m d a u a a m 90 170		Tittsburg	, , , , , , , ,	0713	Orcenheid	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Anderson 20,178	10,741	Topeka 33	3.608 31. 0	07[]	Haverniii	37,175	27,412
Bedford 6,115	3.3 51	Wichita 24 Winfield 5	1 671 23,8	52 1	Holyoko	45 719	35,637
D1		Wichita 44	1 011 20,0	00	Holyoke 4 Hyde Park 1	10.114	
Bloomington 6,460	4,018	l Winfield 5	5,554 $5,1$	841.	Hyde Park]	13.244	10,193
Drogil 7 786	5,905				Lawrence 6	00 ==0	
DIAZII 1,100	0 840	I KENTIUEK	· Y .	1.4	Dan Ledec	62,009	44,654
Columbus 8,130	6,719	KENTUCK		أاء	Leomister 1	12.392	7,269
Bloomington 6,460 Brazil 7,786 Columbus 8,130 Crawforderillo 6,649	6,719	Ashland 6	5,800 4,1	95	Leomister 1	12,392	7,269
Columbus 8,130 Crawfordsville . 6,649	6,719 6,087	Ashland 6	5,800 4,1	95	Leomister 1 Lowell	12,392	7,269 77,696
Columbus	6,719 6,087	Ashland 6 Bellevue 6	5,800 4,1 5,332 3,1	95 63	Leomister 1 Lowell 9	12,392 94,969	7,269
Elkhart 15,184	6,719 6,087 11,360	Ashland 6 Bellevue 6 Bowling Green. 8	5,800 4,1 5,332 3,1 3,226 7,8	95 63 03	Leomister 1 Lowell 9 Lynn 6	12,392 94,969 68,513	7,269 77,696 55,727
Elkhart 15,184 Elwood 12,950	6,719 6,087 11,360 2,28	Ashland 6 Bellevue 6 Bowling Green. 8	5,800 4,1 5,332 3,1 3,226 7,8 2,938 37 3	95 63 03	Leomister 1 Lowell 9	12,392 94,969 68,513	7,269
Elkhart 15,184 Elwood 12,950	6,719 6,087 11,360 2,28	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37,3	95 63 03	Leomister 1 Lowell 6 Lynn 6 Malden 3	12,392 94,969 68,513 33,664	7,269 77,696 55,727 23,031
Elkhart 15,184 Elwood 12,950 Evansville 59,007	6,719 6,087 11,360 2,28' 50,756	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37,3	95 63 03 71	Leomister	12,392 94,969 68,513 33,664 13,609	7,269 77,696 55,727 23,031 13,805
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115	6,719 6,087 11,360 2,28' 50,756 35,39?	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37,3	95 63 03 71	Leomister	12,392 94,969 68,513 33,664 13,609	7,269 77,696 55,727 23,031
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115	6,719 6,087 11,360 2,28' 50,756 35,39?	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37,3	95 63 03 71 64	Leomister 1 Lowell 5 Lynn 6 Malden 5 Marlboro 1 Medford 1	12,392 94,969 68,513 33,664 13,609 18,244	7,269 77,696 55,727 23,031 13,805 11,079
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37.3 5,104 4,2 9,487 7,8	95 63 03 71 64 9°	Leomister 1 Lowell 6 Lynn 6 Malden 7 Marlboro 1 Medford 7 Melrose 7	12,392 94,969 68,513 33,664 13,609 18,244 12,962	7,269 77,696 55,727 23,031 13,805 11,079 8,519
Chawfordsylle	6,719 6,087 11,360 2,28' 50,756 35,399 5,919 6,033	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37.3 5,104 4,2 9,487 7,8	95 63 03 71 64 9°	Leomister 1 Lowell 6 Lynn 6 Malden 7 Marlboro 1 Medford 7 Melrose 7	12,392 94,969 68,513 33,664 13,609 18,244 12,962	7,269 77,696 55,727 23,031 13,805 11,079 8,519
Chawfordsylle	6,719 6,087 11,360 2,28' 50,756 35,399 5,919 6,033	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37.3 5,104 4,2 9,487 7,8	95 63 03 71 64 9°	Leomister 1 Lowell 6 Lynn 6 Malden 7 Marlboro 1 Medford 7 Melrose 7 Milford 1	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,780
Chawfordsylle	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59°	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37.3 5,104 4,2 9,487 7,8	95 63 03 71 64 9° 35	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4 278
Crawfordsylle 6,548	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59° 5,428	Ashland 66 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37.3 5,104 4,2 0,487 7,8 0,272 8,8 1,280 5,8 1,731 161,1	95 63 03 71 64 9° 35	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4 278
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Goshen 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59° 5,428 2,28	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37.3 5,104 4,2 0,487 7,8 0,272 8,8 7,280 5,8 4,731 161,1 5,423 5,3	95 63 03 71 64 9° 35 33 29	Leomister 1 Lowell 6 Lynn 6 Malden 8 Marlboro 1 Medford Melrose 1 Milford 1 Milton 1 Montague 1 Natick	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578 6,150	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4 278
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Goshen 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59° 5,428 2,28	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37.3 5,104 4,2 0,487 7,8 0,272 8,8 7,280 5,8 4,731 161,1 5,423 5,3	95 63 03 71 64 9° 35 33 29	Leomister 1 Lowell 6 Lynn 6 Malden 8 Marlboro 1 Medford Melrose 1 Milford 1 Milton 1 Montague 1 Natick	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578 6,150	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4,278 6,296 9,118
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Goshen 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59° 5,428 2,28	Ashland	5,800 4,1 5,332 3,1 3,226 7,8 5,104 4,2 5,487 7,8 0,272 8,8 7,280 5,8 1,731 161,1 1,423 5,3 3,301 24,9	95 63 03 71 64 9° 35 33 29	Leomister 1 Lowell 6 Lynn 6 Malden 8 Marlboro 1 Medford Melrose 1 Milford 1 Milton 1 Montague 1 Natick	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578 6,150	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4 278
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Goshen 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59° 5,428 2,28	Ashland	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37.3 5,104 4,2 9,487 7,8 0,272 8,8 7,280 5,8 4,731 161,1 1,423 5,3 8,301 24,9 8,301 9,8	95 63 03 71 64 92 35 33 29 58	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578 6,150 9,488 62,442	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4,278 6,296 9,118 40,733
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Goshen 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 159,164	6,719 6,087 11,360 2,28' 50,756 35,39' 5,919 6,033 3,59' 5,428 2,28 7,32° 105,436	Ashland	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 5,104 4,2 9,487 7,8 0,272 8,8 7,280 5,8 4,731 161,1 1,423 5,3 8,301 24,9 8,301 9,8	95 63 03 71 64 9° 35 33 29 58 1°	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 6,578 6,578 6,150 9,488 62,442 14,478	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,780 4,278 6,296 9,118 40,733 13,947
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774	6,719 6,087 11,360 2,28' 50,756 35,399 6,033 3,59° 5,428 2,78 7,32° 105,436 10 6°6	Ashland	5,800 4,1 5,332 3,1 8,226 7,8 2,938 37,3 5,104 4,2 0,487 7,8 7,280 5,8 4,731 161,1 5,423 5,3 3,189 9.8 9,446 12.7	95 63 71 64 9° 35 33 29 58 1° 37	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,150 9,488 62,442 14,478 33,587	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4,278 6,296 9,118 40,733 13,947 24,397
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774	6,719 6,087 11,360 2,28' 50,756 35,399 6,033 3,59° 5,428 2,78 7,32° 105,436 10 6°6	Ashland	5,800 4,1 5,332 3,1 3,226 7,8 2,938 37.3 5,104 4,2 9,487 7,8 0,272 8,8 7,280 5,8 161,1 1,423 5,3 3,301 24,9 3,487 12,89 1,482 5,3 1,584 12,7 1,584 1	95 63 71 64 9° 35 33 29 58 1° 37	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,150 9,488 62,442 14,478 33,587	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4,278 6,296 9,118 40,733 13,947 24,397
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Goshen 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10.774 Kokomo 10,609	6,719 6,087 11,360 2,28' 50,756 35,392 5,919 6,033 3,596 5,428 2,28 7,326 105,436 10 666 8,261	Ashland	5,800 4,1 5,332 3,1 3,226 7,8 2,938 37.3 5,104 4,2 9,487 7,8 0,272 8,8 7,280 5,8 161,1 1,423 5,3 3,301 24,9 3,487 12,89 1,482 5,3 1,584 12,7 1,584 1	95 63 03 71 64 9° 35 33 29 58 1° 37	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578 6,150 9,488 62,442 14,478 33,587 24,200	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,780 4,278 6,296 9,118 40,733 13,947 24,397 16,074
Chawfordsylle 0,5048	6,719 6,087 11,360 2,28' 50,756 35,39' 5,919 6,033 3,59' 5,428 7,32' 105,436 10 6'c, 87261 16,240	Ashland	5,800 4,1 1,332 3,1 2,938 37.3 5,104 4,2 9,487 7,8 0,272 8,8 7,280 5,8 1,731 161,1 5,423 5,3 8,301 24.9 3,189 9.8 9,446 12.7 5,964 4,5	95 63 03 71 64 92 35 33 29 37 97	Leomister	12,392 94,969 68,513 33,664 13,609 13,609 11,376 6,578 6,150 9,488 62,442 14,478 24,200 18,643	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,780 4,278 6,296 9,118 40,733 13,947 24,397 16,074 14,990
Chawfordsylle 0,5048	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59° 5,428 2,78 105,436 10 6°6 8,261 16,243	Ashland	5,800 4,1 5,332 3,1 3,226 7,8 2,938 37.3 1,104 4,2 0,487 7,8 0,272 8,8 1,280 5,8 1,731 161,1 5,423 5,3 1,301 24,9 1,31 161,1 5,423 5,3 1,301 24,9 1,431 161,1 1,442 5,3 1,431 161,1 1,442 5,3 1,431 161,1 1,431 16	95 63 03 71 64 9° 35 33 29 58 1° 37	Leomister	12,392 94,969 68,513 33,664 13,669 18,244 12,962 11,376 6,578 6,578 6,482 9,488 62,442 14,478 33,587 24,200 18,643	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,780 4,278 6,296 9,118 40,733 13:947 24,397 16,074 14,990 6,727
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Laporte 7,113	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59° 5,428 2,78 105,436 10 6°6 8,261 16,243	Ashland	5,800 4,1 5,332 3,1 3,226 7,8 2,938 37.3 1,104 4,2 0,487 7,8 0,272 8,8 1,280 5,8 1,731 161,1 5,423 5,3 1,301 24,9 1,31 161,1 5,423 5,3 1,301 24,9 1,431 161,1 1,442 5,3 1,431 161,1 1,442 5,3 1,431 161,1 1,431 16	95 63 03 71 64 9° 35 33 29 58 1° 37	Leomister	12,392 94,969 68,513 33,664 13,669 18,244 12,962 11,376 6,578 6,578 6,482 9,488 62,442 14,478 33,587 24,200 18,643	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,780 4,278 6,296 9,118 40,733 13:947 24,397 16,074 14,990 6,727
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logalisport 16,204	6,719 6,087 11,360 2,28' 50,756 35,392 6,033 3,595 5,428 2,28 7,320 8,261 16,243 7,126 16,243 7,126 16,243 7,126 11,320	Ashland	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 6,104 4,2 6,487 7,8 0,272 8,8 4,731 161,1 1,423 5,3 3,301 24,9 3,189 9.8 9,8 1,424 4,5 1,425 4,4 12,7 5,964 4,5	95 663 71 664 993 35 819 19 19 61	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 11,376 6,150 9,482 14,478 33,587 24,200 18,643 7,253 7,036	7,269 77,696 55,727 23,031 11,805 11,079 8,519 8,789 4,278 6,296 9,118 40,733 13,947 24,397 16,074 14,990 6,727 4,603
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Goshen 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835	6,719 6,087 11,360 2,28' 50,756 35,39? 5,919 6,033 3,59° 5,428 2,78 105,436 10 6°6 8,261 16,243	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Ilopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouge 11 Lake Cbarles 6	5,800 4,1 5,332 3,1 3,226 7,8 2,938 37.3 6,104 4,2 9,487 7,8 0,272 8,8 4,731 161,1 1,423 5,3 8,301 24,9 9,8 1,731 46,1 1,423 5,3 1,43 5,3 1,4	95 963 973 974 975 9	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 11,376 6,150 9,482 14,478 33,587 24,200 18,643 7,253 7,036	7,269 77,696 55,727 23,031 11,805 11,079 8,519 8,789 4,278 6,296 9,118 40,733 13,947 24,397 16,074 14,990 6,727 4,603
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Goshen 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835	6,719 6,087 11,360 2,28' 50,756 35,39' 6,033 3,59' 5,428 7,32° 105,43' 10,643' 7,126 13,23' 8,93'	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Ilopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouge 11 Lake Cbarles 6	5,800 4,1 5,332 3,1 3,226 7,8 2,938 37.3 6,104 4,2 9,487 7,8 0,272 8,8 4,731 161,1 1,423 5,3 8,301 24,9 9,8 1,731 46,1 1,423 5,3 1,43 5,3 1,4	95 63 33 771 64 99 91 19 19 19 19 19 19 19 19 19 19 19	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 6,150 9,488 62,442 14,478 33,587 24,200 18,643 7,253 7,253 5,480	77,699 77,696 55,727 23,031 13,805 11,079 8,781 4,278 6,296 9,118 40,733 13,947 24,397 16,072 4,603 3,733
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835	6,719 6,080 11,360 2,28' 50,759 5,919 6,033 3,595 5,428 2,28 105,436 10,646 8,261 16,243 11,26 13,320 8,936 8,936	Ashland	5,800 4,1 5,326 7,8 2,938 37.3 5,104 4,7 6,104 7,8 1,280 5,8 1,731 161,1 1,423 5,3 3,301 24.9 3,486 12.7 5,964 4,5 1,269 10,4 5,648 2,8 1,269 10,4 5,648 3,4 5,423 3,2	95 63 33 771 64 99 33 55 81 99 61 78 62 63 63 64 64 64 64 64 64 64 64 64 64 64 64 64	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578 6,150 9,488 62,442 14,478 33,587 24,42 14,478 37,036 5,500 5,500	7,269 77,696 55,727 23,031 11,079 8,519 8,789 4,278 6,296 9,206 40,733 13,947 16,074 14,990 6,727 4,603 3,733 4,563
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835	6,719 6,087 11,360 2,287 50,756 50,756 6,919 6,033 3,597 5,428 2,38 2,38 105,436 10,243 7,126 13,326 13,327 13,769 13,327 13,769	Ashland	5,800 4,1 5,326 7,8 2,938 37.3 5,104 4,7 6,104 7,8 1,280 5,8 1,731 161,1 1,423 5,3 3,301 24.9 3,486 12.7 5,964 4,5 1,269 10,4 5,648 2,8 1,269 10,4 5,648 3,4 5,423 3,2	95 63 33 771 64 99 33 55 81 99 61 78 62 63 63 64 64 64 64 64 64 64 64 64 64 64 64 64	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578 6,150 9,488 62,442 14,478 33,587 24,42 14,478 37,036 5,500 5,500	7,269 77,696 55,727 23,031 11,079 8,519 8,789 4,278 6,296 9,206 40,733 13,947 16,074 14,990 6,727 4,603 3,733 4,563
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850	6,719 6,087 11,360 2,287 50,756 50,756 6,919 6,033 3,597 5,428 2,38 2,38 105,436 10,243 7,126 13,326 13,327 13,769 13,327 13,769	Ashland	5,800 4,1 5,326 7,8 2,938 37.3 5,104 4,7 6,104 7,8 1,280 5,8 1,731 161,1 1,423 5,3 3,301 24.9 3,486 12.7 5,964 4,5 1,269 10,4 5,648 2,8 1,269 10,4 5,648 3,4 5,423 3,2	95 63 33 771 64 99 33 55 81 99 61 78 62 63 63 64 64 64 64 64 64 64 64 64 64 64 64 64	Leomister	12,392 94,969 68,513 33,664 13,609 18,244 12,962 11,376 6,578 6,150 9,488 62,442 14,478 33,587 24,42 14,478 37,036 5,500 5,500	7,269 77,696 55,727 23,031 11,079 8,519 8,789 4,278 6,296 9,206 40,733 13,947 16,074 14,990 6,727 4,603 3,733 4,563
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560	6,719 6,087 11,360 2,28 50,756 35,399 5,919 6,919 6,428 2,78 7,320 10,626 8,261 16,242 13,320 7,126 13,320 8,769 10,776	Ashland	5,800 4,1 5,326 7,8 2,938 37.3 5,104 4,7 6,104 7,8 1,280 5,8 1,731 161,1 1,423 5,3 3,301 24.9 3,486 12.7 5,964 4,5 1,269 10,4 5,648 2,8 1,269 10,4 5,648 3,4 5,423 3,2	95 663 771 64 19 337 19 19 61 78 42 42 44	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Atleboro Northbridge Norwood Orange Palmer Peabody	12,392 948,969 68,513 33,664 113,609 112,242 11,376 6,150 9,488 62,442 13,452 14,200 18,643 7,253 7,253 7,253 5,480 5,520 11,5°3	77,699 77,699 77,699 77,699 78,797 23,031 13,805 11,079 8,519 8,519 4,278 6,298 9,118 40,733 13,947 16,074 14,990 6,727 4,603 3,733 4,568 6;529 0,158
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560	6,719 6,087 11,360 2,28 50,756 35,399 5,919 6,919 6,428 2,78 7,320 10,626 8,261 16,242 13,320 7,126 13,320 8,769 10,776	Ashland	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 6,104 4,7 6,104 7,8 0,272 8,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 6,423 5,3 8,301 24,9 6,463 12,7 6,964 12,7 6,648 2,8 1,279 10,4 6,680 3,4 6,680 3,4 6,681 3,4 7,104 242,0	95 663 771 64 19 337 19 19 61 78 42 42 44	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Atleboro Northbridge Norwood Orange Palmer Peabody	12,392 94,3969 968,513 33,664 113,609 112,242 11,376 6,150 9,488 62,442 13,452 14,200 18,643 7,253 7,253 5,480 5,520 11,5°3	77,699 77,699 77,699 77,699 78,797 23,031 13,805 11,079 8,519 8,519 4,278 6,298 9,118 40,733 13,947 16,074 14,990 6,727 4,603 3,733 4,568 6;529 0,158
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560	6,719 6,087 11,360 2,28 50,756 35,399 5,919 6,919 6,428 2,78 7,320 10,626 8,261 16,242 13,320 7,126 13,320 8,769 10,776	Ashland	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 6,104 4,7 6,104 7,8 0,272 8,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 6,423 5,3 8,301 24,9 6,463 12,7 6,964 12,7 6,648 2,8 1,279 10,4 6,680 3,4 6,680 3,4 6,681 3,4 7,104 242,0	95 63 37 71 64 99 19 61 77 42 42 44	Leomister	12,392 968,513 33,664 13,669 118,246 11,2962 11,376 6,150 9,488 6,150 9,488 14,478 33,587 7,036 5,520 7,801 11,763	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4,278 6,296 9,278 40,733 13,947 24,397 24,397 4,603 3,733 4,568 6,520 9,0158
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560	6,719 6,087 11,360 2,28 50,756 35,399 5,919 6,919 6,428 2,78 7,320 10,626 8,261 16,242 13,320 7,126 13,320 8,769 10,776	Ashland	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 6,104 4,7 6,104 7,8 0,272 8,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 6,423 5,3 8,301 24,9 6,463 12,7 6,964 12,7 6,648 2,8 1,279 10,4 6,680 3,4 6,680 3,4 6,681 3,4 7,104 242,0	95 63 37 71 64 99 19 61 77 42 42 44	Leomister	12,392 968,513 33,664 13,669 118,246 11,2962 11,376 6,150 9,488 6,150 9,488 14,478 33,587 7,036 5,520 7,801 11,763	7,269 77,696 55,727 23,031 13,805 11,079 8,519 8,789 4,278 6,296 9,278 40,733 13,947 24,397 24,397 4,603 3,733 4,568 6,520 9,0158
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 19,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncle 20,942 Muncle 20,942 New Albany 20,628	6,787 6,087 11,360 2,287 50,756 35,399 5,919 6,919 6,428 7,320 10,646 8,261 16,240 10,240 10,776 8,936 8,769 10,776 11,345 11,345 21,045 11,345	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Ilopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouge 11 Lake Charles 6 Monroe 5 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 6,104 4,2 9,487 7,8 0,272 8,8 4,731 161,1 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 3,2 1,5,648 2,8 1,279 10,4 1,5,648 2,8 1,279 10,4 1,683 10,5	95 663 771 64 93 93 95 97 99 99 99 99 99 99 99 99 99 99 99 99	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Attleboro Northoridge Norwood Crange Palmer Peshody Pittsfield Clymouth	12,392 968,513 33,664 113,664 113,962 11,366 6,150 9,482 61,478 33,587 7,253 7,253 7,253 7,253 11,573 11,573 21,766 9,892 9,892 9,892 9,892 9,892 9,892 9,892	77,699 77,699 77,699 77,699 23,031 13,805 11,079 8,519 8,789 4,278 6,296 9,296 9,733 13,947 16,074 14,997 4,603 3,733 3,733 4,568 6,529 6,727 4,603 3,733 17,281 7,314
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 19,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncle 20,942 Muncle 20,942 New Albany 20,628	6,787 6,087 11,360 2,287 50,756 35,399 5,919 6,919 6,428 7,320 10,646 8,261 16,240 10,240 10,776 8,936 8,769 10,776 11,345 11,345 21,045 11,345	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Ilopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouge 11 Lake Charles 6 Monroe 5 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 6,104 4,2 9,487 7,8 0,272 8,8 4,731 161,1 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 5,3 1,423 3,2 1,5,648 2,8 1,279 10,4 1,5,648 2,8 1,279 10,4 1,683 10,5	95 663 771 64 93 93 95 97 99 99 99 99 99 99 99 99 99 99 99 99	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Attleboro Northoridge Norwood Crange Palmer Peshody Pittsfield Clymouth	12,392 968,513 33,664 113,664 113,962 11,366 6,150 9,482 61,478 33,587 7,253 7,253 7,253 7,253 11,573 11,573 21,766 9,892 9,892 9,892 9,892 9,892 9,892 9,892	77,699 77,699 77,699 77,699 23,031 13,805 11,079 8,519 8,789 4,278 6,296 9,296 9,733 13,947 16,074 14,997 4,603 3,733 3,733 4,568 6,529 6,727 4,603 3,733 17,281 7,314
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Laporte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Rew Albany 20,628	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,919 5,428 2,28 7,320 10,646 8,769 8,76	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Baton Rouge 11 Lake Charles 6 New Orleans 287 New Orleans 287 Auburn 12 Augusta 11 Augusta 11 Bangor 21	5,800 4,1 5,326 7,8 5,332 3,1 5,226 7,8 6,104 4,7 6,104 7,8 6,272 8,8 6,127 28,8 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 5,3 6,423 10,5 6,648 2,8 6,815 3 4 7,104 242,0 6,815 3 4 7,104 242,0 6,815 3 4 7,104 242,0 6,815 3 10,5 6,815 3 10,5 6,815 3 4 7,104 242,0	95 63 71 99 99 99 99 99 99 99 99 99 99 99 99 99	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Northoridge Norwood Crange Palmer Peabody Pittsfield Plymouth Ouincy Revere	12,3969 94,969 968,513 33,6649 113,6699 118,244 112,962 11,376 6,150 6,150 6,442 13,478 7,036 5,480 7,801 11,673 21,766 9,592 23,899	7,269 77,696 77,696 13,805 11,079 8,519 8,519 4,278 6,296 6,296 6,727 14,990 6,727 14,990 6,727 14,990 17,314 16,727 17,314 16,723 17,314 16,731 16,632 17,314 16,731 16,632 17,314 16,731 16,731 16,731 16,731 16,731 17,314 16,731 16,731 16,731 16,731 16,731 16,731 17,314 16,731 16,731 16,731 16,731 16,731 16,731 16,731 17,314 16,731 16,7
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,919 5,428 2,78 7,329 10,696 8,261 17,126 13,329 8,769 10,776 3,371 4,705 11,345 21,050 7,020 3,076	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouse 11 Lake Cbarles 6 Monroe 5 New Iberia 6 New Orleans 287 MAINE Auburn 12 Augusta 11 Bangor 21 Bath 10	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 6,104 4,2 6,104 4,2 6,104 12,7 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 6,815 3,01 24,9 6,815 3,2 6,	95 663 771 899 935 877 999 999 61 877 877 877 877 877 877 877 877 877 87	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Northoridge Norwood Crange Palmer Peabody Pittsfield Plymouth Ouincy Revere	12,3969 94,969 968,513 33,6649 113,6699 118,244 112,962 11,376 6,150 6,150 6,442 13,478 7,036 5,480 7,801 11,673 21,766 9,592 23,899	7,269 77,696 77,696 13,805 11,079 8,519 8,519 4,278 6,296 6,296 6,727 14,990 6,727 14,990 6,727 14,990 17,314 16,727 17,314 16,723 17,314 16,731 16,632 17,314 16,731 16,632 17,314 16,731 16,731 16,731 16,731 16,731 17,314 16,731 16,731 16,731 16,731 16,731 16,731 17,314 16,731 16,731 16,731 16,731 16,731 16,731 16,731 17,314 16,731 16,7
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,919 5,428 2,78 7,329 10,696 8,261 17,126 13,329 8,769 10,776 3,371 4,705 11,345 21,050 7,020 3,076	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Ulopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouse 11 Lake Cbarles 6 Monroe 5 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Batb 11	5,800 4,1 5,332 3,1 5,226 7,8 2,938 37.3 6,104 4,2 6,487 7,8 0,272 8,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 6,815 3,301 24,9 6,815 3,2 6,	95 663 771 892 95 893 873 874 877 878 878 878 878 878 878 878 878	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Addams North Attleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland	12,3969 94,9619 94,9629 968,513 33,669 113,609 118,244 112,962 111,376 6,150 92,482 14,4787 24,207 18,643 7,253 5,480 5,520 11,573 21,766 23,899 10,395	77,669 77,669 77,696 77,696 78,612,031 13,805 14,079 8,518 4,278 6,296 9,118 40,733 14,990 6,727 4,6074 14,990 6,727 4,663 17,281 7,281 7,281 16,723 5,668 5,218
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Pern 8,463 Princeton 6,041 Princeton 6,041 Princeton 6,041	6,719 6,087 11,360 2,28 50,756 35,399 5,919 6,919 6,242 2,28 7,320 10,626 8,261 16,242 13,320 10,776 8,769 10,776 13,45 2,1020 7,020 3,079 16,609	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouge 11 Lake Charles 6 New Orleans 287 MAINE, Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16	5,800 4,1 5,326 7,8 5,332 3,1 5,226 7,8 7,938 37.3 6,104 4,7 7,8 6,226 5,8 1,280 5,8 1,280 5,8 1,423 5,3 1,43 5,3 1,43 5,3 1,43 5,3 1,53 10,5 1,53	95 63 71 42 61 82 99 19 19 19 19 19 19 19 19 19 19 19 19	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Nowth Adams North Adams North Attleboro Northoridge Norwood Orange Palmer Pashody Pittsfield Plymouth Oulingy Revere Pockland Salem	12,3969 94,9629 68,513 33,6649 113,6699 118,244 112,962 116,578 66,150 66,150 66,150 67,150 6	7,269 77,699 77,699 77,699 78,519 8,519 8,789 4,278 6,296 9,296 4,073 13,947 16,074 14,990 6,727 4,603 3,733 4,568 6,520 7,314 7,314 17,281 7,314 5,668 5,213
Elkhart 15,184 Elwood 12,950 Evansville 59,077 Fort Wayne 45,115 Frankfort 7,100 Goshen 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Laporte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226	6,719 6,087 11,360 2,28 50,756 35,392 5,919 6,033 3,592 5,428 7,322 105,432 10 6°6 8,261 13,367 10,776 3,371 4,705 13,372 13,456 13,371 4,705 13,456 14,456	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISJAN Alexandria 55 Baton Rouse 11 Lake Charles 6 Now Orleans 287 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Brunswick 6	5,800 4,1 5,326 7,8 2,938 37,3 6,104 4,2 6,487 7,8 0,272 8,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 1,423 5,3 3,301 24,9 3,189 9,8 1,423 5,3 3,301 24,9 1,446 12,7 5,964 4,5 1,42,3 10,5 1,42,3 3,4 1,42,3 10,5 1,6,83 10	95 663 77 764 99 93 35 33 99 99 99 99 99 99 99 99 99 99 99 99	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus	12,3969 94,968,513 33,6649 118,244 12,962 66,150 9,488 62,4478 33,587 7,253 7,253 7,253 7,253 11,573 21,7692 23,899 15,327 35,96	7,269 77,699 77,699 77,699 78,519 13,805 11,079 8,518 40,733 14,278 6,296 9,118 40,733 13,947 24,397 16,074 4,603 3,733 4,568 6,520 10,158 17,281 16,723 5,668 5,213 30,671
Elkhart 15,184 Elwood 12,950 Evansville 59,077 Fort Wayne 45,115 Frankfort 7,100 Goshen 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Laporte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226	6,719 6,087 11,360 2,28 50,756 35,392 5,919 6,033 3,592 5,428 7,322 105,432 10 6°6 8,261 13,367 10,776 3,371 4,705 13,372 13,456 13,371 4,705 13,456 14,456	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Baton Rouse 11 Lake Charles 6 Now Orleans 287 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Brunswick 6	5,800 4,1 5,326 7,8 2,938 37,3 6,104 4,2 6,487 7,8 0,272 8,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 1,423 5,3 3,301 24,9 3,189 9.8 9,446 12,7 5,964 4,5 1,423 3,43 6,680 3,4 6,680 3,4 6,680 3,4 6,680 3,4 6,681 3,4 6,681 11,8 6,681 11,8 6,681 11,8 6,681 11,8 6,681 11,8 6,681 11,8 6,681 11,8 6,681 11,8 6,681 11,8 6,681 11,8 6,681 11,8 6,681 14,8	95 663 77 764 99 93 35 33 99 99 99 99 99 99 99 99 99 99 99 99	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus	12,3969 94,968,513 33,6649 118,244 12,962 66,150 9,488 62,4478 33,587 7,253 7,253 7,253 7,253 11,573 21,7692 23,899 15,327 35,96	7,269 77,699 77,699 77,699 78,519 13,805 11,079 8,518 40,733 14,278 6,296 9,118 40,733 13,947 24,397 16,074 4,603 3,733 4,568 6,520 10,158 17,281 16,723 5,668 5,213 30,671
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larotte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Sevmour 6,445 Shelbyville 7,169	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,428 2,28 7,329 10,696 8,261 11,26 13,329 8,769 10,776 8,769 10,776 11,345 11	Ashland	5,800 4,1 5,332 3,1 5,226 7,8 7,832 37,3 7,8 7,938 37,3 1,938 37,3 1,938 37,3 1,938 37,3 1,938 1,938 1,7 1,938 1,9	95 663 77 764 99 93 35 33 99 99 99 99 99 99 99 99 99 99 99 99	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus	12,3969 94,968,513 33,6649 118,244 12,962 66,150 9,488 62,4478 33,587 7,253 7,253 7,253 7,253 11,573 21,7692 23,899 15,327 35,96	7,269 77,699 77,699 77,699 78,519 13,805 11,079 8,518 40,733 14,278 6,296 9,118 40,733 13,947 24,397 16,074 4,603 3,733 4,568 6,520 10,158 17,281 16,723 5,668 5,213 30,671
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 I Johnsond 18,226 Sermour 6,445 Shelbyville 7,169 South Bend 35,999	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,919 5,428 2,28 105,436 10,666 8,769 8,	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Baton Rouse 11 Lake Charles 6 New Orleans 287 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Batb 10 Biddeford 16 Brunswick 6 Calais 7 Cardiner 5	5,800 4,1 5,326 7,8 5,332 3,1 5,226 7,8 6,104 4,2 6,487 7,8 6,272 8,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 6,423 5,3 8,301 24,9 6,680 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 3,4 6,8	9563 963 977 978 979 979 979 979 979 979	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus	12,3969 94,968,513 33,6649 118,244 12,962 66,150 9,488 62,4478 33,587 7,253 7,253 7,253 7,253 11,573 21,7692 23,899 15,327 35,96	7,269 77,699 77,699 77,699 78,519 13,805 11,079 8,518 40,733 14,278 6,296 9,118 40,733 13,947 24,397 16,074 4,603 3,733 4,568 6,520 10,158 17,281 16,723 5,668 5,213 30,671
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 I Johnsond 18,226 Sermour 6,445 Shelbyville 7,169 South Bend 35,999	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,919 5,428 2,28 105,436 10,666 8,769 8,	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Baton Rouse 11 Lake Charles 6 New Orleans 287 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Batb 10 Biddeford 16 Brunswick 6 Calais 7 Cardiner 5	5,800 4,1 5,326 7,8 5,332 3,1 5,226 7,8 6,104 4,2 6,487 7,8 6,272 8,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 4,731 161,1 7,280 5,8 6,423 5,3 8,301 24,9 6,680 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 3,4 6,8	9563 9577 9683 979 979 979 979 979 979 979 97	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Nowton North Adams North Adams Northampton Northbridge Norwood Crange Palmer Pabody Pittsfield Plymouth Ouincy Revere Pockland Sangus Sangus Somerville Somergield	12,3969 94,969 968,513 33,664 13,609 118,244 12,962 16,578 6,150 6,458 62,442 24,200 18,244 27,200 18,253 21,766 5,480 5,520 7,803 21,766 5,480 5,520 7,803 21,766 5,61 66,61	7,269 77,699 77,699 77,699 78,789 8,519 8,789 4,278 6,296 9,118 40,737 16,074 14,990 6,727 44,397 16,074 17,314 16,723 17,314 16,723 4,568 5,213 30,731 40,172 44,179
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Seymour 6,445 Shelhyville 7,169 South Bend 35,999	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,428 2,78 7,32° 10,6° 8,261 11,345 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 21,126 3,076 11,345 21,126 3,076 11,345 21,126 3,076 3,076 11,345 21,126 3,076 3	Ashland	5,800 4,1 5,326 7,8 2,938 37,3 6,104 4,2 6,104 4,2 6,104 7,8 1,272 8,8 1,7280 5,8 1,7280 5,8 1,423 5,3 3,301 24,9 3,3189 9,8 1,423 5,3 3,301 24,9 1,423 5,3 1,43 5,3 1,43 5	95 663 003 7644 99 35 33 99 19 61 20 33 44 50 20 33 34 50 30 31 50 31 50 31 50 50 50 50 50 50 50 50 50 50 50 50 50	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Adtleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Somerville Springfield Stoneham	12,3969 94,969 968,513 33,6649 113,6699 118,2444 12,962 16,578 69,488 62,442 17,253 77,253 77,253 77,253 17,573 21,7692 23,899 10,3927 35,966 61,613 62,079 61,613	7,269 77,699 77,699 77,699 77,699 78,519 13,805 14,079 8,519 4,278 6,299 9,118 40,733 13,473 4,563 6,727 4,603 4,568 6,727 4,603 17,281 7,281 7,281 7,281 30,701 36,723 40,152 44,155
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Seymour 6,445 Shelhyville 7,169 South Bend 35,999	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,428 2,78 7,32° 10,6° 8,261 11,345 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 21,126 3,076 11,345 21,126 3,076 11,345 21,126 3,076 3,076 11,345 21,126 3,076 3	Ashland	5,800 4,1 5,326 7,8 2,938 37,3 6,104 4,2 6,104 4,2 6,104 7,8 1,272 8,8 1,7280 5,8 1,7280 5,8 1,423 5,3 3,301 24,9 3,3189 9,8 1,423 5,3 3,301 24,9 1,423 5,3 1,43 5,3 1,43 5	95 663 003 7644 99 35 33 99 19 61 20 33 44 50 20 33 34 50 30 31 50 31 50 31 50 50 50 50 50 50 50 50 50 50 50 50 50	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Adtleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Somerville Springfield Stoneham	12,3969 94,969 968,513 33,6649 113,6699 118,2444 12,962 16,578 69,488 62,442 17,253 77,253 77,253 77,253 17,573 21,7692 23,899 10,3927 35,966 61,613 62,079 61,613	7,269 77,699 77,699 77,699 77,699 78,519 13,805 14,079 8,519 4,278 6,299 9,118 40,733 13,473 4,563 6,727 4,603 4,568 6,727 4,603 17,281 7,281 7,281 7,281 30,701 36,723 40,152 44,155
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Seymour 6,445 Shelhyville 7,169 South Bend 35,999	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,428 2,78 7,32° 10,6° 8,261 11,345 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 11,345 21,126 21,126 3,076 11,345 21,126 3,076 11,345 21,126 3,076 3,076 11,345 21,126 3,076 3	Ashland	5,800 4,1 5,326 7,8 2,938 37,3 6,104 4,2 6,104 4,2 6,104 7,8 1,272 8,8 1,7280 5,8 1,7280 5,8 1,423 5,3 3,301 24,9 3,3189 9,8 1,423 5,3 3,301 24,9 1,423 5,3 1,43 5,3 1,43 5	95 663 003 7644 99 35 33 99 19 61 20 33 44 50 20 33 34 50 30 31 50 31 50 31 50 50 50 50 50 50 50 50 50 50 50 50 50	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Ouincy Revere Pockland Salem Sangus Someryille Springfield Stoneham Taunton	12,3969 94,969 968,513 33,6649 113,6699 118,244 112,962 16,578 62,442 114,478 33,587 7,253 7,863 5,520 71,563 23,589 10,397 35,643 62,613 61,613 62,613	7,269 77,699 77,699 77,699 23,031 13,805 11,079 8,519 8,519 8,4278 6,296 9,118 40,733 13,947 14,990 6,727 4,603 3,733 4,568 6;520 4,603 3,733 4,568 67,27 4,603 3,733 4,568 67,27 4,603 3,733 4,568 67,27 4,603 3,733 4,568 67,27 4,603 3,733 4,568 67,27 4,603 3,733 4,568 67,27 4,603 3,733 4,568 67,27 4,613 5,668 5,20 6,1
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hantford 5,912 Huntingtou 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Lognisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Seymour 6,445 Shelbyville 7,169 South Bend 35,99 Tèrre Haute 36,673 Valparaiso 6,280 Vincennes 10,249	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,919 5,428 2,28 7,320 10,646 8,769 8,769 8,769 8,769 13,371 13,45 21,050 13,451 21,050 13,451 21,451 30,217 5,451 5,45	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN 6 Raton Rouge 11 Lake Charles 6 New Orleans 287 New Iberia 26 New Orleans 287 Augusta 11 Augusta 11 Augusta 11 Bangor 21 Batb 10 Biddeford 16 Brunswick 6 Calais 7 Gardiner 5 Lewiston 23 Orleans 5 Frankford 16 Gardiner 5 Lewiston 23 Orleans 5 Calais 7 Gardiner 5 Lewiston 23 Orleans 5 Cardiner 5 Lewiston 23 Orleans 5 Cardiner 5 Lewiston 23 Orleans 5 Cardiner 5 Lewiston 23 Orleans 5 Orleans 5 Cardiner 5 Lewiston 25 Orleans 5 Orleans	5,800 4,1 5,326 7,8 5,332 3,1 5,226 7,8 5,104 4,2 5,104 4,2 5,104 4,2 5,104 4,2 6,487 7,8 6,143 5,3 8,301 24,46 12,7 5,964 4,5 6,680 3,4 6,680 3,4 6,680 3,4 6,680 3,4 6,680 3,4 6,6815 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 14,4 6,680 19,1 6,1683 10,5 6,1685 7,2 6,1683 10,5 6,1685 7,2 6,1683 10,5 6,1685 7,2 6,1683 10,5 6,1686 8,16 6,1686 7,665 7,2 6,1683 10,5 6,1686 8,16 6,1686 8,16 6,1686 8,16	9563 95764 963 9764	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Nortbridge Norwood Crange Palmer Peabody Pittsfield Plymouth Ouincy Revere Pockland Salem Sangus Somerville Springfield Stoneham Taunton Wattham	12,3969 94,968,513 33,6694 118,244 11,376 6,150 9,488 62,442 33,580 5,801 11,573 21,573 5,684 61,615 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613	77,690 77,690 77,690 77,690 77,690 78,512 13,805 14,079 8,513 42,783 40,733 14,990 6,727 44,397 16,074 14,990 6,727 46,074 16,723 40,152 40,152 40,152 44,172 41,152 41,152 41,152 41,152 41,152 41,152 41,152 41,152 41,152
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Seymour 6,445 Shelhyville 7,169 South Bend 35,999 Terre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Wabash 8,618	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,428 7,320 6,626 8,261 10,626 8,769 10,769 11,345 21,050 7,020 11,345 21,819 3,595 8,769 10,507 11,819 3,595 10,508 10,	Ashland	5,800 4,1 5,326 7,1 8,226 7,2 1,938 37,3 1,226 7,8 1,938 37,3 1,938 37,3 1,293 1,293 1,293 1,497 1,280 5,428 1,423 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,299 1,294 1,295	9563 95764 963 9764 9764 9764 9776	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Nortbridge Norwood Crange Palmer Peabody Pittsfield Plymouth Ouincy Revere Pockland Salem Sangus Somerville Springfield Stoneham Taunton Wattham	12,3969 94,968,513 33,6694 118,244 11,376 6,150 9,488 62,442 33,580 5,801 11,573 21,573 5,684 61,615 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613 61,613	77,690 77,690 77,690 77,690 77,690 78,512 13,805 14,079 8,513 42,783 40,733 14,990 6,727 44,397 16,074 14,990 6,727 46,074 16,723 40,152 40,152 40,152 44,172 41,152 41,152 41,152 41,152 41,152 41,152 41,152 41,152 41,152
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Gosben 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Seymour 6,445 Shelhyville 7,169 South Bend 35,999 Terre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Wabash 8,618	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,428 7,320 6,626 8,261 10,626 8,769 10,769 11,345 21,050 7,020 11,345 21,819 3,595 8,769 10,507 11,819 3,595 10,508 10,	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISJAN Alexandria 5 Baton Rouse 11 Lake Charles 6 Monroe 5 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Brunswick 6 Calais 7 Gardiner 5 Lewiston 23 Oldtown 19 Portland 5 Rockland 6	5,800 4,1 5,326 7,1 8,226 7,2 1,938 37,3 1,226 7,8 1,938 37,3 1,938 37,3 1,938 37,3 1,938 37,3 1,938 37,3 1,938 37,3 1,938 37,3 1,938 1,93	95 63 77 764 99 133 333 333 99 19 61 74 22 74 21 74 19 10 11 11 12 12 17 17 17 17 17 17 17 17 17 17 17 17 17	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Addens Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Somingfield Stoneham Taunton Waltham Watertown	12,3969 94,968,513 33,6649 118,2444 12,962 16,578 9,488 9,488 33,587 7,253 7,253 7,253 11,573 21,7692 23,899 10,397 35,686 61,613 62,0-9 31,036 62,0-9 31,036 323,480	7,269 77,699 77,699 77,699 78,519 13,805 14,079 8,519 4,278 6,299 9,118 40,733 13,473 14,990 16,727 4,607 4,
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Secmour 6,445 Shelhyville 7,169 South Bend 35,999 Terre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Winbash 8,551	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,428 2,28 7,320 10,600 8,261 10,600 10,700 11,345	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouge 11 Lake Charles 6 New Orleans 287 MAINE Augusta 11 Bangor 21 Bath 10 Biddeford 16 Brunswick 6 Calais 7 Gardiner 5 Cardiner	5,800 4,1 5,326 7,1 5,226 7,1 5,104 7,8 1,272 8,8 1,280 5,8 1,280 5,8 1,280 5,423 5,3 1,43 5,4 1	95 63 77 764 99 133 333 333 99 19 61 74 22 74 21 74 19 10 11 11 12 12 17 17 17 17 17 17 17 17 17 17 17 17 17	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Addens Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Somingfield Stoneham Taunton Waltham Watertown	12,3969 94,968,513 313,6609 118,242 11,376 6,150 9,488 62,442 133,5800 7,256 7,256 7,256 7,256 11,76 23,899 55,901 11,76 61,107	7,269 77,699 77,696 77,696 78,519 8,519 8,519 8,519 8,733 13,947 14,990 6,727 4,603 3,733 4,568 6,520 7,11,281 7,314 7,314 14,990 6,727 4,603 3,733 4,568 6,520 4,17,281 7,314 4,179 6,158 18,707 7,073
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Secmour 6,445 Shelhyville 7,169 South Bend 35,999 Terre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Winbash 8,551	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,428 2,28 7,320 10,600 8,261 10,600 10,700 11,345	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 55 Row Iberia 6 Nonroe 5 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Brunswick 6 Calais 7 Gardiner 5 Lewiston 23 Oldtown 5 Portland 8 Saco 5 Outh Portland 6	5,800 4,1 5,326 7,8 8,332 3,1 8,226 7,8 8,2938 37,3 1,2938 37,3 1,2938 37,3 1,2938 37,3 1,2938 37,3 1,293 1,2938 37,3 1,493 1,	9563 3771 663 3771 669 957 9355 617 927 937 937 937 937 937 937 937 937 937 93	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Addens Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Somingfield Stoneham Taunton Waltham Watertown	12,3969 94,968,513 33,6649 118,2444 12,962 16,578 9,488 9,488 33,587 7,253 7,253 7,253 11,573 21,7692 23,899 10,397 35,686 61,613 62,0-9 31,036 62,0-9 31,036 323,480	7,269 77,699 77,696 77,696 78,519 8,519 8,519 8,519 8,733 13,947 14,990 6,727 4,603 3,733 4,568 6,520 7,11,281 7,314 7,314 14,990 6,727 4,603 3,733 4,568 6,520 4,17,281 7,314 4,179 6,158 18,707 7,073
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Lanorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mount Vernon 5,132 Muncle 20,942 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Princefon 6,041 Fichmond 18,226 Secrmour 6,445 Shelbyville 7,169 South Bend 35,999 Terre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Wabash 8,618 Washington 8,551 INDIAN TERRITO	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,428 2,28 10,436 10,646 7,126 16,240 7,126 16,240 7,126 16,240 7,126 16,240 7,126 16,240 10,76 3,371 11,345 21,05 10,064 11,05 11	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 55 Row Iberia 6 Nonroe 5 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Brunswick 6 Calais 7 Gardiner 5 Lewiston 23 Oldtown 5 Portland 8 Saco 5 Outh Portland 6	5,800 4,1 5,326 7,8 8,332 3,1 8,226 7,8 8,2938 37,3 1,2938 37,3 1,2938 37,3 1,2938 37,3 1,2938 37,3 1,293 1,2938 37,3 1,493 1,	95 63 37 764 95 37 61 92 93 93 91 91 91 91 91 91 91 91 91 91 91 91 91	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Attleboro Nortbbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Ouincy Revere Pockland Salem Sangus Somerville Stoneham Taunton Waltham Watertown Webster Westfield	12,3969 94,968,513 33,6649 118,244 12,9626 6,150 9,488 62,448 33,587 17,253 7,253 5,480 11,573 21,763 23,895 5,984 66,150 66,150 67,873 66,160 67,873 66,160 67,873 67,874 68,874	7,269 77,699 77,699 78,519 13,805 11,079 8,519 8,5789 4,278 6,296 6,296 6,787 14,990 6,727 4,603 3,733 4,1568 6,529 17,281 16,723 40,158 5,213 30,71 30,71 30,71 4,672 44,179 6,727 44,672 7,314 16,723 40,158 5,213 30,71 30,71 31,731 40,159 41,179 61,568 61,520 41,179 61,568 61,520 7,311 61,731 61,731 61,731 61,731 61,731 61,731 61,731 61,731
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Goshen 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Mincle 20,942 New Albany 20,628 Peru 8,463 Frinceton 6,041 Fichmond 18,226 Seymour 6,445 Shelbyville 7,169 South Bend 35,999 Torre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Wabbash 8,613 Washington 8,551 INDIAN TERRITO Ardmore 5,681	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,428 2,28 7,320 10,600 8,261 10,600 10,700 11,345	Ashland	5,800 4,1 5,326 7,1 5,226 7,8 7,280 5,104 4,2 1,487 7,8 1,272 8,8 1,7280 5,8 1,7280 5,8 1,7280 5,8 1,7280 5,9 1,7280 5,9 1,7280 5,9 1,7280 5,9 1,7280 5,9 1,7280 5,9 1,7280 5,9 1,7280 1,9	95 63 3771 64 95 95 97 97 97 97 97 97 97 97 97 97 97 97 97	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Adtleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Springfield Stoneham Taunton Walthum Watertown Webster Westfield West Springfield	12, 3969 94, 969 968, 513 33, 6649 118, 2444 12, 962 16, 578 69, 442 11, 376 62, 442 14, 478 33, 587 7, 253 7, 253 7, 253 5, 520 11, 766 23, 899 10, 395 61, 613 62, 61, 613 63, 613 64, 61, 613 65, 613 66, 61, 613 66, 61, 613 66, 61, 613 67, 6	7,269 77,696 77,696 78,697 23,031 13,805 14,079 8,519 8,519 8,519 4,278 6,296 9,118 40,733 13,947 16,074 14,990 14,997 16,074 16,727 4,603 4,568 6,520 6,520 6,520 17,281 17,281 16,723 4,668 17,281 17,281 16,723 4,1672 4,179 6,707 17,031 9,807
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Goshen 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Mincle 20,942 New Albany 20,628 Peru 8,463 Frinceton 6,041 Fichmond 18,226 Seymour 6,445 Shelbyville 7,169 South Bend 35,999 Torre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Wabbash 8,613 Washington 8,551 INDIAN TERRITO Ardmore 5,681	6,719 6,087 11,360 2,28 50,756 35,399 5,919 5,919 5,428 2,28 10,436 10,646 7,126 16,240 7,126 16,240 7,126 16,240 7,126 16,240 7,126 16,240 10,76 3,371 11,345 21,05 10,064 11,05 11	Ashland	5,800 4,1 5,326 7,8 8,332 3,1 8,226 7,8 8,2938 37,3 1,2938 37,3 1,2938 37,3 1,2938 37,3 1,2938 37,3 1,293 1,2938 37,3 1,493 1,	95 63 3771 64 95 95 97 97 97 97 97 97 97 97 97 97 97 97 97	Leomister Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Newburyport Newton North Adams North Adams North Adtleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Springfield Stoneham Taunton Walthum Watertown Webster Westfield West Springfield	12, 3969 94, 969 968, 513 33, 6649 118, 2444 12, 962 16, 578 69, 442 11, 376 62, 442 14, 478 33, 587 7, 253 7, 253 7, 253 5, 520 11, 766 23, 899 10, 395 61, 613 62, 61, 613 63, 613 64, 61, 613 65, 613 66, 61, 613 66, 61, 613 66, 61, 613 67, 6	7,269 77,696 77,696 78,697 23,031 13,805 14,079 8,519 8,519 8,519 4,278 6,296 9,118 40,733 13,947 16,074 14,990 14,997 16,074 16,727 4,603 4,568 6,520 6,520 6,520 17,281 17,281 16,723 4,668 17,281 17,281 16,723 4,1672 4,179 6,707 17,031 9,807
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Secmour 6,445 Shelbyville 7,169 South Bend 35,999 Terre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Winbash 8,418 Washington 8,551 INDIAN TERRITO Ardmore 5,681	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,919 5,428 2,28 7,329 10,696 8,261 10,696 8,769 10,776 8,769 10,776 11,345 11	Ashland 6 Bellevue 6 Bowling Green 8 Coyington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouge 11 Lake Charles 6 New Orleans 287 MAINE Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Brunswick 6 Calais 7 Gardiner 5 Cardiner 5 C	5,800 4,1 5,326 7,1 5,322 3,1 5,322 3,1 5,322 3,1 5,323 37,3 6,104 4,5 6,104 7,8 8,8 1,280 5,8 1,280 5,8 1,280 5,8 1,423 5,3 1,43 5,43 1	95 63 3771 64 95 95 97 97 97 97 97 97 97 97 97 97 97 97 97	Leomister Lowell Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Nowth Adams North Adams North Attleboro Northoridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Saugus Somerville Springfield Stoneham Taunton Wattham Watertown Westfield West Springfield West Springfield West Springfield	12,3969 94,968,513 33,6699 118,244 11,376 6,150 9,488 62,448 33,580 5,801 11,576 5,480 5,501 11,576 61,615 5,081 61,615 61,076 6	7,269 77,699 77,699 77,699 78,787 23,031 13,805 11,079 8,519 8,789 4,278 6,296 6,296 6,296 6,297 16,077 16,077 16,077 16,077 17,314 16,723 30,733 4,568 5,213 30,733 40,152 44,179 6,155 5,448 7,731 9,805 5,773
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Secmour 6,445 Shelbyville 7,169 South Bend 35,999 Terre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Winbash 8,418 Washington 8,551 INDIAN TERRITO Ardmore 5,681	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,919 5,428 2,28 7,329 10,696 8,261 10,696 8,769 10,776 8,769 10,776 11,345 11	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 55 Baton Rouse 11 Lake Charles 6 Monroe 5 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Rrunswick 6 Calais 7 Gardiner 5 Lewiston 23 Oldtown 5 Portland 8 Saco 5 South Portland 6 Waterville 4 Westbrook 6 MARYLAN	5,800 4,1 5,326 7,332 3,1 5,226 7,332 3,1 5,226 7,8 6,104 4,2 6,487 7,8 6,272 8,8 6,483 5,331 161,1 7,280 5,423 5,3 8,301 246 12,7 5,964 4,5 1,279 10,4 6,680 3,4 6,680 3,4 6,6815 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,816 3,4 6,816 6,8	9563 3771 4071 9683 9771 9771 9771 9771 9771 9771 9771 977	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford NorthAdams North Adams North Addams North Attleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Springfield Sylband Waltham Watertown Webster West field West Springfield Winchendon Whitman	12,3969 968,513 33,6609 118,244 12,366 96,188 97,488 97,488 97,488 17,253 17,25	7,269 77,699 77,699 77,699 78,519 13,805 11,079 8,519 8,5789 4,278 6,296 9,118 40,733 13,947 24,397 16,074 14,999 17,281 16,723 40,152 44,179 6,723 40,152 44,179 6,723 40,152 44,179 7,073 7,073 7,073 19,5077 4,499
Elkhart 15,184 Elwood 12,950 Evansville 59,007 Fort Wayne 45,115 Frankfort 7,100 Gosben 7 810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logalisport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Mount Vernon 5,132 Muncie 20,942 New Albany 20,628 Peru 8,463 Princeton 6,041 Fichmond 18,226 Secmour 6,445 Shelbyville 7,169 South Bend 35,999 Terre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Winbash 8,418 Washington 8,551 INDIAN TERRITO Ardmore 5,681	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,919 5,428 2,28 7,329 10,696 8,261 10,696 8,769 10,776 8,769 10,776 11,345 11	Ashland 6 Bellevue 6 Bowling Green 8 Covington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 204 Maysville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 55 Baton Rouse 11 Lake Charles 6 Monroe 5 New Iberia 6 New Orleans 287 Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Rrunswick 6 Calais 7 Gardiner 5 Lewiston 23 Oldtown 5 Portland 8 Saco 5 South Portland 6 Waterville 4 Westbrook 6 MARYLAN	5,800 4,1 5,326 7,332 3,1 5,226 7,332 3,1 5,226 7,8 6,104 4,2 6,487 7,8 6,272 8,8 6,483 5,331 161,1 7,280 5,423 5,3 8,301 246 12,7 5,964 4,5 1,279 10,4 6,680 3,4 6,680 3,4 6,6815 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,816 3,4 6,816 6,8	9563 3771 4071 9683 9771 9771 9771 9771 9771 9771 9771 977	Leomister Lowell Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford Nowth Adams North Adams North Attleboro Northoridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Saugus Somerville Springfield Stoneham Taunton Wattham Watertown Westfield West Springfield West Springfield West Springfield	12,3969 94,968,513 33,6699 118,244 11,376 6,150 9,488 62,448 33,580 5,801 11,576 5,480 5,501 11,576 61,615 5,081 61,615 61,076 6	7,269 77,699 77,699 77,699 78,519 13,805 11,079 8,519 8,5789 4,278 6,296 9,118 40,733 13,947 24,397 16,074 14,999 17,281 16,723 40,152 44,179 6,723 40,152 44,179 6,723 40,152 44,179 7,073 7,073 7,073 19,5077 4,499
Elkhart 15,184 Elwood 12,950 Evansville 59,07 Fort Wayne 45,115 Frankfort 7,100 Goshen 7810 Greensburg 5,034 Hammond 12,376 Hartford 5,912 Huntington 9,491 Indianapolis 169,164 Jeffersonville 10,774 Kokomo 10,609 Lafayette 18,116 Larorte 7,113 Logansport 16,204 Madison 7,835 Marion 17,337 Michigan City 14,850 Mishawaka 5,560 Mount Vernon 5,132 Muncle 20,942 New Albany 20,628 Peru 8,463 Mincle 20,942 New Albany 20,628 Peru 8,463 Frinceton 6,041 Fichmond 18,226 Seymour 6,445 Shelbyville 7,169 South Bend 35,999 Torre Haute 36,673 Valparaiso 6,280 Vincennes 10,249 Wabbash 8,613 Washington 8,551 INDIAN TERRITO Ardmore 5,681	6,719 6,087 11,360 2,28 50,756 35,392 5,919 5,919 5,919 5,428 2,28 7,329 10,696 8,261 10,696 8,769 10,776 8,769 10,776 11,345 11	Ashland 6 Bellevue 6 Bowling Green 8 Coyington 42 Dayton 6 Frankfort 9 Henderson 10 Hopkinsville 7 Louisville 6 Newport 28 Owensboro 13 Paducah 19 Winchester 5 LOUISIAN Alexandria 5 Baton Rouge 11 Lake Charles 6 New Orleans 287 MAINE Auburn 12 Augusta 11 Bangor 21 Bath 10 Biddeford 16 Brunswick 6 Calais 7 Gardiner 5 Cardiner 5 C	5,800 4,1 5,326 7,32 5,332 3,1 5,226 7,8 6,104 4,2 6,487 7,8 6,104 12,7 7,280 5,423 5,3 8,301 24,46 12,7 5,964 4,5 1,279 10,4 6,680 3,4 6,680 3,4 6,680 3,4 6,6815 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 3,4 7,104 242,0 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,815 3,4 6,816 3,4 6,8	9563 3771 4071 9683 9771 9771 9771 9771 9771 9771 9771 977	Leomister Lowell Lowell Lynn Malden Marlboro Medford Melrose Milford Milton Montague Natick New Bedford NorthAdams North Adams North Addams North Attleboro Northbridge Norwood Orange Palmer Peabody Pittsfield Plymouth Onincy Revere Pockland Salem Sangus Somerville Springfield Sylband Waltham Watertown Webster West field West Springfield Winchendon Whitman	12,3969 968,513 33,6609 118,244 12,366 96,188 97,488 97,488 97,488 17,253 17,25	7,269 77,699 77,699 77,699 78,519 13,805 11,079 8,519 8,5789 4,278 6,296 9,118 40,733 13,947 24,397 16,074 14,999 17,281 16,723 40,152 44,179 6,723 40,152 44,179 6,723 40,152 44,179 7,073 7,073 7,073 19,5077 4,499

STATISTICS OF POPULATION.

Woburn 1900.						-
	1590.	1000	4500	1	4000 4100	
VF UDUIL 14,404		1900.	1890.	F732 mm Z mm	1900. 1890.	
	13,499	Marshall 5,686	4,789	Elmira	35,872 30.893	3
Worcester118,421	84,655	Mexico 5,699	4,297	L'ulton		
MICHIGAN		Moberly 8,012	Q 051	Geneva	10 422 7 650	7
MICHIGAN.		Norrodo 7 411	8,251	d'Iona Malla	10,433 7,557	6
Adrian 9,654	8,756	Nevada 7,461	7,262	Glens Falls	12,613 9,509	9
Alpena 11,802	11,283	St. Joseph102,979	59 993	Gloversville	18,349 13,864	4
Aun Autor 14.500		St. Louis575.238	451,770	Haverstraw	5 935 5 070	
Aun Arbor 14,509	9,431	Sedalia 15,231 Springfield 23,267 Webb 9,201	14,086	Lacuternous	5,935 5,070	U
Battle Creek 18,563	13,191	Springfield 09 007		Herkimer	5,555	
Bay City 21,048	27.83	Springheid 23,207	21,850	Hoosick Falls	5,671 7,014	4
Routon Harbon C.500		webb 9,201	5,043	Hortellsville		c
Benton Harbor. 6,562	3,692	MONTANA.			11,918 10,996	
Cadlilac 5,997	41.461	MONTANA.		Hudson	. 9,528 9,97	0
Cheboygan 6,489 Coldwater 6,216 Detroit 285,704	6 93	Anaconda 9,453	3,975	liion	5,138 4,057	7
Cothwater C. 210	0,20.			Ituaca "	13,136 11,09	
Coldwater 6,216	5,241	Butte 30,740	10,723	Tuesday and	10,100 11,09	
Detioit285,704	205.87a	Great Falls 14,930	3,979	Jamestown	22,892 16,038	3
Escanaba 9,549	6,808	Helena 10,770	13,834	Johnstown	10,130 7,768	Я
Elint 12 102			,	Kingston		1
Flint 13,103	9,803	NEBRASKA.		Langingham	21,000	
Grand Rapids 87,565	60,278	Beatrice 7,875	10 000	Lansingburg	12,595 10,550	
Holland, 7,790	3,945	Beatrice 7,875	13,830	Little Falls	10,381 8,783	3
louin 5 900		Fremont	6,747	Lockport	16,581 16,038	
louia 5,209	4,482	Grand Island 7,554	7,536			
Iron Mountain 9,242	8,599	Hastings	13,584	Malone	5,935 4,986	
frouwood 9,705	7,74	Kearney 5 684	8,073	Matteawan	5,807 4,278	8
frouwood 9,705 Ishpeming 13,255	11 10	Lincoln to ten	55 154	Jainuletown	14,522 11,977	
15upeming 15,200	11,19	Lincoln 40,169	55,154	Mount Wounen	20 246 10 60	
Jacksou 25,180	20,798	Nebraska City 7,380	11,940	Mount Vernon	20,346 10,836	7
Kalamazoo 24,404	17,853	Nebraska City 7,380 Omaha	140,452	Newburg New York	24,943 23,08	7
Lansing 16 405		South Omaha 25,001	8,062	New York	343 /202 151530	1
Lansing 16,485	13,102		0,002	Niggara Falls	10 457	*
Ludington 7,166	7,517	NEW HAMPSHIRE		Niagara Falls No. Tonawanda.	13,437	
Manistee 14.260	12,812		**	No. Tonawanda.	9,069 4,793	3
Marquette 10.050	9,093	Berlin 8,886	3,729	Norwich	5,766 5,212	
Managines 10 058		Concord 19,632		()vilanchura	19 699 11 000	9
Marquette 10 058 Menominee 12,818	10,630	Dover 19,002	17,004	Ogdensburg	12,633 11,662	4
Monroe 5.043	5,258	Dover 13,207	12,790	luieani	9.462 7.353	8
Monroe 5,043 Mount Clemens. 6,576	4.748	Franklin 5,846	4,085	Oneida	6,364 6,083	3
March Cichichs. 0,310		Keene. 9,165 Laconia 8,042		Opents	7 147 6 976	
Muskegon 20,818	22,702	Laconia 8 042	6,143	Carconta	1,111 0,412	
Neganaee 6,935	6.078	Mauchester 56,987	44,126	Oswego	22,199 21,843	2
Owosso 8,696	6,561	Nashua		Owego	5.039	
Potoskov 5 995	2,872	D	19,311	Peekskill	10,358 9,676	e
Petoskey 5,235 Pontiae 9,769	2,014	Portsmouth 10,637	9,827 7,396	Plattchurg	9 424 7 016	ŏ
Pontiae 9,769	6,206	Rochester	7,396	Plattsburg	8,434 7,010	
Port Huron 19,158	13.543	Somersworth 7,023	6,207	Port Chester	7,440 5,274	4
Saginaw 42,345	46,322		, , ,	Port Jervis	9,385 9 327	7
St Locard 5 155	0.000	NEW JERSEY.		Poughkeepsie	24.029 22,206	
St. Joseph 5,155	3,733	Atlantic City 27,838	13,055	Ponggoleon	24.025 22,200	(3
Sault Ste. Marie 10,538	5,760	Roxonno 99 799		Rensselaer	7,466 7,301	1
Traverse 9,407	4,833	Bayonne 32,722	19,033	Rochester	162,608 133,896	6
West Bay City 13,119	12,981	B'oomfield	7,708	Rome	15,343 14,991	1
Wroudette 5 100	0.0.=	Bridgeton 13,912	11,424	Saratoga Sprgs	12,409 11 9/8	
Wyandotte 5.183	3.817	Burlington	7,264	Salaroga Spies	21 000 10 000	
Ypsilanti 7,378	6,129	Camden 75.935	58,313	Schenectady	31,682 19.903	
MINNESOTA.		East Orange 21,506	13,282	Seneca Falls	6,519 $6,116$	6
MINNESOIA.		Elizabeth 52,180	97 Te 1	Sing Sing	7,939 9,3 2	
Austin 5,474 Brainerd 7,524	3,901		37,764	Syracuse	108,374 88.143	2
Brainerd 7,524	5,703	(Houcester 6,840	6,564	Topomanda	.00,014 00.140	
Crookston 5,359	3,457	Hackensack 9,443	6,004	Tonawanda	7,421 7,145	
Duluth		Harrison 10,596	8,338	Troy	60,651 60,956	6
Duluth 52,969	33.115	Hoboken 59,364	13,648	Utica	56,383 44,007	7
Faribault 7,868 Fergus Falls 6,072 Little Falls 5,774 Mankato 10,599	6,520	Jersey City206,433	163,003	Watertown	21,696 14.725	
Fergus Falls 6.072	3,772	Kearney 10,896		Waterwillet		
Little Rolls 5 774	2.354	Long Drongle	P 001	Watervliet		1
Montento		Long Branch 8,872	7,231	White Plains	14,321 12,967	O.
манкато 10,599	8,838	Miliville 10,583	10,002		7.899 4.042	4
	164 72 1			Yonkers	7.899 4.042	
printe apons203.718	104,10	Montelair 13,962	8.656	Yonkers	7.899 4.042	
Minneapolis202,718 New Ulm 5.403		Montelair	8.656		7.899 4.042 47,931 3 2,033	
New Ulm 5,403	3,711	Morristown	8.656	NORTH CAL	7.899 4.042 47,931 32,033 ROLINA.	3
New Ulm 5,403 Owatonna 5,561	3,741 3,849	Morristown	8,656 8,156 181,830	NORTH CAI	7.899 4.042 47,931 32,033 ROLINA. 14,694 10.235	3
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525	3,711 3,849 6,291	Morristown	8,656 8,156 181,830 18,603	NORTH CAI	7.899 4.042 47,931 32,033 ROLINA. 14,694 10.235	3
New Ulm	3,711 3,849 6,291 5,321	Morristown	8,656 8,156 181,830 18,603 18,844	NORTH CAI Asheville Charlotte	7.899 4.042 47,931 32,033 ROLINA. 14,694 10,235 18,091 -11,557	3 5 7
New Ulm	3,711 3,849 6,291 5,321	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777	8,656 8,156 181,830 18,603 18,844 15,028	NORTH CAI Asheville Charlotte Concord	7.899 4.042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,551 7,910 4,338	3 5 7
New Ulm. 5,403 Owatonna 5,561 Red Wing. 7,525 Rochester 6,843 St. Paul. 163,065	3,711 3,849 6,291 5,321 133,156	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777 Paterson 105,171	8,656 8,156 181,830 18,603 18,844 13,028	NORTH CAI Asheville	7.899 4.042 47,931 32,033 ROLINA. 14,694 10,235 18,091 -11,551 7,910 4,339 6.679 5.488	3 5 7 9
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul 163,065 Stillwater 12,318	3,711 3,849 6,294 5,321 133,156 11,260	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777 Paterson 105,171	8,656 8,156 181,830 18,603 18,844 13,028	NORTH CAI Asheville	7.899 4.042 47,931 32,033 ROLINA. 14,694 10,235 18,091 -11,551 7,910 4,339 6.679 5.488	3 5 7 9 8
New Ulm. 5,403 Owatonna 5,561 Red Wing. 7,525 Rochester 6,843 St. Paul. 163,065	3,711 3,849 6,291 5,321 133,156	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777 Paterson 105,171 Perth Amboy 17,699	8,656 8,156 181,830 18,603 18,844 13,028 78,347 9,512	NORTH CAI Asheville	7.899 4.042 47,931 32,033 ROLINA. 14,694 10,235 18,091 -11,551 7,910 4,339 6.679 5.488	3 5 7 9 8
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rocbester 6,843 St. Paul 163,065 Stillwater 12,318 Winona 19,714	3,711 3,849 6,294 5,321 133,156 11,260	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052	8,656 8,156 181,830 18,603 18,844 13,028 78,347 9,512 8,644	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City. Goldsboro	7.899 4.042 47,931 32,033 ROLINA. 14,694 10,235 18,091 -11,557 7,910 4,335 6,679 5,488 6,348, 3,251 5,877 4,012	3 5 7 9 8 1 7
New Ulm. 5,403 Owatonna 5,561 Red Wing. 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPPI.	3,711 3,849 6,294 5,321 133,156 11,260 18,208	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,669 PhillIpsburg 10,052 Plainfield 15,869 Plainfield 15,869	8,656 8,156 181,830 18,603 18,844 13,028 78,347 9,512 8,644 11,267	NORTH CAI Asheville	7,899 4,042 47,931 32,033 ROLINA. 14,694 10,235 7,910 4,333 6,679 5,48E 6,348, 3,257 5,877 4,017 10,035 3,317	3 579 5177
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163.065 Stillwater 12,318 Winona 19,714 MISSISPPI. Biloxi 5,467	3,711 3,849 6,294 5,321 133,156 11,260 18,208	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,669 PhillIpsburg 10,052 Plainfield 15,869 Plainfield 15,869	8,656 8,156 181,830 18,603 18,844 13,028 78,347 9,512 8,644 11,267 7,105	NORTH CAI Asheville Charlotte Concord Durham Etizabeth City Goldsboro Greensboro Newbern	7,899 4,042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,557 7,910 4,33 6,679 5,485 6,348, 3,251 10,035 3,317 9,090 7,843	3 5 7 9 8 1 7 7 3
New Ulm	3,711 3,849 6,294 5,321 133,156 11,260 18,208	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777 Paterson 105,171 Perth Amboy 17,689 Phillpsburg 10,052 Plainfield 15,669 Rahway 7,835 Sale m 5,811	8,656 8,156 181,830 18,603 18,844 13,028 78,347 9,512 8,644 11,267 7,105 5,516	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City Goldsboro Greensboro Newbern Raleigh	7,899 4.042 47,931 32,033 COLINA. 14,694 10,235 18,091 11,555 6,679 5,438 6,679 5,877 4,017 10,035 3,317 9,090 7,843 3,643 12,678	3 5 7 9 8 1 7 7 3
New Ulm	3,711 3,849 6,294 5,321 133,156 11,260 18,208 3,234 4,559	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777 Paterson 105,171 Perth Amboy 17,689 Phillpsburg 10,052 Plainfield 15,669 Rahway 7,835 Sale m 5,811	8,656 8,156 181,830 18,603 18,844 13,028 78,347 9,512 8,644 11,267 7,105 5,516	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City Goldsboro Greensboro Newbern Raleigh	7,899 4.042 47,931 32,033 COLINA. 14,694 10,235 18,091 11,555 6,679 5,438 6,679 5,877 4,017 10,035 3,317 9,090 7,843 3,643 12,678	3 5 7 9 8 1 7 7 3 8
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPPI Biloxi 5,467 Columbus 6,484 Greenville 7,624	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777 Paterson 105,171 Perth Amboy 17,689 Phillpsburg 10,052 Plainfield 15,669 Rahway 7,835 Sale m 5,811	8,656 8,156 181,850 18,603 18,844 15,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330	NORTH CAI Asheville Charlotte Concord Durham Elizabeth City. Goldsboro Greensboro Newbern Raleigh	7,899 4,042 47,931 32,033 32,033 32,033 32,033 32,031 14,694 10,235 18,091 11,557 7,910 4,33 6,679 5,48 6,6348, 3,251 5,877 4,017 10,035 3,317 9,090 7,843 13,643 12,678 6,277 4,118	3 5 7 9 8 1 7 7 3 8 8
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPPI Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,516	3,711 3,849 6,291 5,321 133.156 11,260 18,208 3,234 4,559 6,658 5,92	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,777 Partna 10,5171 Perth Amboy 17,699 Phillpsburg 10,052 Plainfield 15,369 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407	8,656 8,156 181,850 18,603 18,844 13,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington	7,899 4.042 47,931 32,033 OOLINA. 14,694 10,235 18,091 11,555 6,679 5,487 6,348, 3,251 7,000 7,843 19,090 7,843 13,643 12,678 6,277 4,418	3 579 51773886
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPP1. Biloxi 5,467 Columbus 6,444 Greenville 7,624 Jackson 7,816 Meridistp 14,050	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,669 PhillIpsburg 10,052 Plainfield 15,369 Rahway 7,985 Salem 5,811 South Amboy 6,849 Trenton 73,407 Union 15,187	8,656 8,156 181,850 18,603 18,844 13,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington	7,899 4.042 47,931 32,033 OOLINA. 14,694 10,235 18,091 11,555 6,679 5,487 6,348, 3,251 7,000 7,843 19,090 7,843 13,643 12,678 6,277 4,418	3 579 51773886
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPP1. Biloxi 5,467 Columbus 6,444 Greenville 7,624 Jackson 7,816 Meridistp 14,050	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Perth Amboy 17,699 Phillpsburg 10,052 Plainfield 15,669 Rahway 7,895 Salem 5,811 South Amboy 6,849 Trenton 73,407 Union 15,187 West Hoboken 23,094	8,656 8,156 181,850 18,603 18,844 13,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington	7,899 4.042 47,931 32,033 (OLINA. 14,694 10,235 18,091 11,555 6,679 5,487 6,348, 3,251 5,877 4.012 10,035 3.31 9,090 7.843 6,277 4.012 6,277 4.412 20,976 20,056 10,008 8,018	3 579 51773886
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPP1. Biloxi 5,467 Columbus 6,444 Greenville 7,624 Jackson 7,816 Meridistp 14,050	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Perth Amboy 17,699 Phillpsburg 10,052 Plainfield 15,669 Rahway 7,895 Salem 5,811 South Amboy 6,849 Trenton 73,407 Union 15,187 West Hoboken 23,094	8,656 8,156 181,830 18,603 18,844 13,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643 11,665	NORTH CAI Asheville Charlotte Concord Durham Elizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA	7,899 4.042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,555 7,910 4,338 6,679 5,488 6,348, 3,251 10,035 3.317 9,090 7.843 3,643 12,678 6,277 4,418 20,976 20,056 10,008 8,018	3 579 51773886
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISPIL Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,411 Passaic 27,77 Perth 17,699 Phillpsburg 10,052 Plainfield 15,869 Rahway 7,835 Salem 5,811 South Amboy 6,849 Trenton 73,497 Union 15,187 West Hoboken 23,094 NEW MEXICO	8,656 8,156 181,850 18,844 18,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 10,643 11,665	NORTH CAI Asheville Charlotte Concord Durham Exizabeth City. Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA	7,899 4,042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,557 7,910 4,335 6,679 5,488 6,348, 3,251 5,877 4,017 9,090 7,843 13,643 12,678 6,277 4,418 20,976 20,056 10,008 8,018 KOTA. 9,589 5,664	3 57 57 77 38 86 86
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPPI Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,516 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI.	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 13,373	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,414 Passaic 27,777 Paterson 105,171 Perth Amboy 17,659 PhillIpsburg 10,052 Plainfield 15,809 Rahway 7,935 Salem 5,811 South Amboy 6,849 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albnquerque 6,238	8,656 8,156 181,850 18,844 18,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 10,643 11,665	NORTH CAI Asheville Charlotte Concord Durham Exizabeth City. Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA	7,899 4,042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,557 7,910 4,335 6,679 5,488 6,348, 3,251 5,877 4,017 9,090 7,843 13,643 12,678 6,277 4,418 20,976 20,056 10,008 8,018 KOTA. 9,589 5,664	3 579 B17738868
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISPPI. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI Aurora 6,191	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 13,373	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,411 Passaic 27,77 Perth 17,699 Phillpsburg 10,052 Plainfield 15,869 Rahway 7,835 Salem 5,811 South Amboy 6,849 Trenton 73,497 Union 15,187 West Hoboken 23,094 NEW MEXICO	8,656 8,156 181,850 18,844 18,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 10,643 11,665	NORTH CAI Asheville Charlotte Concord Durham Elizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA	7,899 4,042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,557 7,910 4,335 6,679 5,488 6,348, 3,251 5,877 4,017 9,090 7,843 13,643 12,678 6,277 4,418 20,976 20,056 10,008 8,018 KOTA. 9,589 5,664	3 579 B17738868
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISPPI. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI Aurora 6,191	3,711 3,842 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 13,373	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,41 Passaic 27,77 Paterson J05,171 Perth Amboy 17,699 PhillIpsburg 10,052 Plainfield 15,869 Rahway 7,035 Salem 5,811 South Aniboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603	8,656 8,156 181,850 18,844 18,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 10,643 11,665	NORTH CAI Asheville Charlotte Concord Durham Exizabeth City. Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA	7,899 4,042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,557 7,910 4,33 6,679 5,488 6,348, 3,251 10,035 3,317 9,090 7,843 13,643 12,673 13,673 13,673 13,67	3 579 B17738868
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISPIPI. Biloxi 5,467 Columbus 6,484 Greenwille 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI. Aurora 6,191 Brooklield 5,484	3,741 3,849 6,291 5,321 11,260 11,260 18,208 3,234 4,559 6,658 5,92 10,101 13,373	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,369 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603 NEW YORK	8,656 8,156 181,850 18,603 18,847 13,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643 11,665	NORTH CAI Asheville Charlotte Concord Durham Edizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks	7,899 4.042 47,931 32,033 32,033 14,694 10,235 18,091 11,555 7,910 4,331 6,679 5,486 6,348, 3,251 10,035 3.317 10,035 3.317 20,090 7,843 12,677 4,412 20,976 20,056 10,008 8,018 4,07A 9,589 7,652 4,979	3 579 B 1 7 7 3 8 8 6 8 4 9
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISPIPI. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI. Aurora 6,191 Brooklield 5,484 Carthage 9,446 Carthage 9,446 Carthage 9,446	3,711 3,849 6,291 5,321 11,260 11,260 11,260 3,234 4,559 10,624 10,101 113,373 3,482 4,547 10,101 17,101 18,208	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,414 Passaic 27,777 Paterson 105,171 Perth Amboy 17,659 Phillipsburg 10,052 Plainfield 15,269 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albaquerque 6,233 Santa Fe 5,603 NEW YORK Albany 94,151	8,656 8,156 181,850 18,608 18,844 11,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643 11,665 3,755 6,185	NORTH CAI Asheville Charlotte Concord Durham Enizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO	7,899 4.042 47,931 32,033 (OLINA. 14,694 10,235 18,091 11,555 7,910 4,338 6,679 5,488 6,348, 3,257 10,035 3,317 9,090 7,843 6,277 4,912 20,976 20,056 6,277 4,118 20,976 20,056 4,978 7,652 4,978 7,652 4,978	3 579 B17738868 49 1
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISPIPI. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,516 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chillicothe 6,905	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,9; 10,624 10,101 13,373 3,482 4,547 7,981 5,717	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,414 Passaic 27,777 Paterson 105,171 Perth Amboy 17,659 Phillipsburg 10,052 Plainfield 15,269 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albaquerque 6,233 Santa Fe 5,603 NEW YORK Albany 94,151	8,656 8,156 181,850 18,608 18,844 11,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643 11,665 3,755 6,185	NORTH CAI Asheville Charlotte Concord Durham Edizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks	7,899 4.042 47,931 32,033 (OLINA. 14,694 10,235 18,091 11,555 7,910 4,338 6,679 5,488 6,348, 3,257 10,035 3,317 9,090 7,843 6,277 4,912 20,976 20,056 6,277 4,118 20,976 20,056 4,978 7,652 4,978 7,652 4,978	3 579 B17738868 49 1
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISPIPI. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,516 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chillicothe 6,905	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,9; 10,624 10,101 13,373 3,482 4,547 7,981 5,717	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,411 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,869 Rahway 7,935 Salem 5,811 South Aniboy 6,349 Trenton 73,407 Trion 15,187 West Hoboken 23,094 NEW MEXICO Albiquerque 6,238 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929	8,656 8,156 181,850 18,603 18,603 18,844 13,028 78,347 9,512 8,644 11,207 7,105 5,516 4,330 11,665 3,785 6,185 94,923 17,336	NORTH CAI Asheville Charlotte Concord Durham Exizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Akron Alliance	7,899 4.042 47,931 32,033 32,033 32,033 32,033 32,033 14,694 10,235 18,091 -11,557 7,910 4,338 6,679 5,487 6,348, 3,257 5,877 4,017 9,090 7,843 13,643 12,678 6,277 4,418 20,976 20,056 6,277 4,418 20,976 20,056 10,008 8,018 IKOTA. 9,589 5,664 7,652 4,979 5,42,728 27,601	3 579 B17738868 49 17
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISPPI. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,516 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI. Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chillicothe 6,905 Clinton 5,061	3,711 3,849 6,291 5,321 11,260 11,260 18,208 3,234 4,559 6,659 10,624 10,101 13,373 3,482 4,547 7,981 5,717 7,717	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,369 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Auburn 30,345 Newara 20,929 Auburn 30,345	8,656 8,156 181,830 18,803 18,804 18,844 11,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458 11,663 11,663 3,785 6,185 94,923 17,336 25,858	NORTH CAI Asheville Charlotte Concord Durham Enizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks OHIO Akron Alliance Ashtabula	7,899 4.042 47,931 32,033 10AINA. 14,694 10,235 18,091 -11,555 7,910 4,333 6,679 5,487 6,348, 3,251 5,877 4,012 10,035 3.317 10,035 3.317 20,976 20,056 10,008 8,018 IKOTA. 9,589 5,664 7,652 4,979 0. 42,728 27,00 42,728 27,00 12,949 8,338	3 579 B17738868 49 178
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714	3,711 3,849 6,291 5,321 133,156 11,260 18,208 4,559 6,658 5,92 10,624 10,101 13,373 3,482 4,547 7,981 5,717 4,737 4,737	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,411 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,869 Rahway 7,035 Salem 5,811 South Aniboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albiquerque 6,238 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Batayia 9,180 Santayia 9,180	8,656 8,156 181,830 18,603 18,603 18,844 18,028 78,347 9,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643 11,665 3,755 6,185 94,923 17,336 25,858 7,221	NORTH CAI Asheville Charlotte Concord Durham Enizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Aktron Alliance Ashtabula Bedford	7,899 4.042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,555 7,910 4,338 6,679 5,486 6,348, 3,257 10,035 3,317 9,090 7,843 3,643 12,678 6,277 4,418 20,976 20,056 6,277 4,418 9,589 5,664 7,652 4,979 1,589 5,664 42,728 27,601 8,974 7,607 12,949 8,338 9,912 9,934	3 579 B17738868 49 1784
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714	3,711,3,849,6,291,5,321,11,260,118,208,11,260,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,208,208,208,208,208,208,208,208,20	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,369 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603 Santa Fe 5,603 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 39,648 Binghamton 39,648 Binghamton 39,648 Binghamton 39,648 Batavia 39,180 Binghamton 39,648 Batavia 39,180 Binghamton 39,648 Binghamton 39,648 Batavia 39,180 Binghamton 39,648 Batavia 39,180 Binghamton 39,644 Santavia 39,180 Santa	8,656 8,156 181,830 18,803 18,844 11,028 78,347 7,105 5,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643 11,665 3,785 6,185 94,923 17,336 25,858 7,221 35,005	NORTH CAI Asheville Charlotte Concord Durham Edizabeth City. Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Akron Akliance Ashtabula Bedford Bellefontaine	7,899 4,042 47,931 32,033 ROLINA. 14,694 10,235 18,091 11,557 7,910 4,335 6,679 5,487 6,348, 3,257 5,877 4,017 9,090 7,843 13,643 12,643 13,643 12,643 13,643 12,643 13,643 12,643 13,643 12,076 20,976 20,056 10,008 8,018 IKOTA. 9,589 5,664 9,589 5,664 42,728 27,607 12,949 8,338 9,912 9,934 6,649 9,934	3 579 B1773 8868 49 17845
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPP1. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI. Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chilicothe 6,905 Clinton 5,061 Columbia 5,651 De Soto 5,611 Hannibal 12,780	3,711,3,849,6,291,5,321,11,260,118,208,11,260,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,118,208,208,208,208,208,208,208,208,208,20	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,369 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603 Santa Fe 5,603 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 39,648 Binghamton 39,648 Binghamton 39,648 Binghamton 39,648 Batavia 39,180 Binghamton 39,648 Batavia 39,180 Binghamton 39,648 Binghamton 39,648 Batavia 39,180 Binghamton 39,648 Batavia 39,180 Binghamton 39,644 Santavia 39,180 Santa	8,656 8,156 181,830 18,803 18,844 11,028 78,347 7,105 5,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643 11,665 3,785 6,185 94,923 17,336 25,858 7,221 35,005	NORTH CAI Asheville Charlotte Concord Durham Edizabeth City. Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Akron Akliance Ashtabula Bedford Bellefontaine	7,899 4.042 47,931 32,033 (OLINA. 14,694 10,235 18,091 11,555 7,910 4,338 6,679 5,487 6,348, 3,251 5,877 4,017 10,035 3.317 9,090 7,843 3,643 12.678 6,277 4,411 20,056 6,277 4,418 6,277 4,976 10,008 8,018 KOTA. 9,589 5,666 7,652 4,979 1,2,349 9,912 12,949 8,338 9,912 9,934 6,649 4,248 6,649 4,248	3 579 B1773 8868 49 17845
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPP1. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI. Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chilicothe 6,905 Clinton 5,061 Columbia 5,651 De Soto 5,611 Hannibal 12,780	3,711,3,849,6,291,5,321,11,260,11,260,11,260,11,260,10,101,101,101,101,101,101,101,101,10	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,411 Passaic 27,77 Perth 17,699 Phillpsburg 10,052 Plainfield 15,369 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,467 Union 15,187 West Hoboken 23,094 NEW MEXICO Albaquerque 6,238 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 39,647 Canandaigua 6,151	8,656 8,156 181,830 18,803 18,844 11,028 78,347 7,105 5,512 8,644 11,267 7,105 5,516 4,330 57,458 10,643 11,665 3,785 6,185 94,923 17,336 25,858 7,221 35,005	NORTH CAI Asheville Charlotte Concord Durham Edizabeth City. Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Akron Akliance Ashtabula Bedford Bellefontaine	7,899 4.042 47,931 32,033 32,033 32,033 32,033 32,033 32,033 32,033 32,033 4,691 -11,555 5,487 6,679 5,487 6,379 4,012 10,035 3,317 9,090 7,843 6,277 4,912 20,976 20,056 6,277 4,912 6,627 4,979 20,559 5,666 4,979 42,728 27,601 8,974 75602 42,728 8,974 75602 42,728 8,974 75604 4,979 9,912 9,934 6,649 4,245 5,667 3,467	3 579 B17738868 49 178457
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 MISSISSIPP1. Biloxi 5,467 Columbus 6,484 Greenville 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI. Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chilicothe 6,905 Clinton 5,061 Columbia 5,651 De Soto 5,611 Hannibal 12,780	3,711 3,849 6,291 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 13,373 3,482 4,547 7,981 5,717 4,737 4,737 4,737 4,737 4,737 6,380 12,887 6,389	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,411 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,869 Rahway 7,035 Salem 5,811 South Aniboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albiquerque 6,238 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 39,647 Cantanidaigua 6,151 Catskill 5,484	8,656 8,156 181,830 18,844 118,028 78,347 7,105 5,124 7,105 57,458 10,643 11,665 3,755 6,185 94,923 17,336 25,858 7,221 35,005 5,868 4,926	NORTH CAI Asheville Charlotte Concord Durham Edizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Akron Alliance Ashtabula Bedford Bellefontaine Howking Green	7,899 4,042 47,931 32,033 32,033 32,033 32,033 32,033 14,694 10,235 18,091 11,557 7,910 4,338 6,679 5,488 6,679 4,017 10,035 3,317 9,090 7,843 12,674 4,912 20,976 20,056 6,277 4,418 20,976 20,056 10,008 8,018 IKOTA. 9,589 5,664 7,652 4,979 1. 42,728 27,601 8,974 7,607 12,949 8,338 9,912 9,933 6,649 4,248 5,067 3,467 5,6560 3,467	3 579B17738868 49 1784574
New Ulm 5,403 Owatoma 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 Winona 19,714 Biloxi 5,467 Columbus 6,484 Greenwille 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chillicothe 6,905 Cliuton 5,061 Columbia 5,651 De Soto 5,611 Hannibal 12,780 Independence 6,971 Jopliu 28,023	3,711 3,849 6,291 5,321 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 3,373 4,547 7,981 5,77 4,737 4,000 12,857 6,380 12,857 6,380	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,269 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 30,647 Canandaigua 6,151 Catskill 5,434 Cohoes 23,910 Cohoes 23,910	8,656 8,156 181,830 18,684 118,028 78,347 9,512 8,512 5,516 4,330 57,458 10,643 11,665 3,755 6,185 6,185 7,221 33,005 5,868 4,920 22,500	NORTH CAI Asheville Charlotte Concord Durham Edizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks OHIO Akron Alliance Ashtabula Bedford Bellefontaine Bowling Green Buckeye City Cambridge	7,899 4.042 47,931 32,033 32,033 14,694 10,235 18,091 11,555 18,677 4.012 10,035 3.317 10,035 3.317 10,035 3.317 20,976 20,056 10,008 8,018 1KOTA. 9,589 5,664 7,652 4,979 1,242,728 27,00 12,949 3,338 9,912 9,934 5,067 3,467 6,566 5,974 4,248 5,067 3,467 6,566 5,974 4,361	3 579517738868 49 17845741
New Ulm 5,403 Owatoma 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 Winona 19,714 Biloxi 5,467 Columbus 6,484 Greenwille 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chillicothe 6,905 Cliuton 5,061 Columbia 5,651 De Soto 5,611 Hannibal 12,780 Independence 6,971 Jopliu 28,023	3,711 3,849 6,291 5,321 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 3,373 4,547 7,981 5,77 4,737 4,000 12,857 6,380 12,857 6,380	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,269 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 30,647 Canandaigua 6,151 Catskill 5,434 Cohoes 23,910 Cohoes 23,910	8,656 8,156 181,830 18,844 113,028 78,347 7,105 5,122 8,644 11,207 7,105 4,330 57,465 11,665 3,785 6,185 94,923 17,336 22,500 4,926 22,500 8,550	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Akron Alliance Ashtabula Bedford Belefontaine Bowling Green Buckeye City Cambridge Canal Dover.	7,899 4.042 47,931 32,033 (OLINA. 14,694 10,235 18,091 11,555 7,910 4,338 6,679 5,487 6,348, 3,257 10,035 3,317 9,090 7,843 6,277 4.017 20,976 20,056 6,277 4.415 20,976 20,056 6,277 4.415 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,560 5,974 7,652 4.979 9,934 6,649 4,248 9,912 9,934 6,649 4,248 6,560 5,974 6,560 5,974 6,560 5,974 6,560 5,974 6,542 4,347	3 579B17738868 49 178457410
New Ulm 5,403 Owatoma 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 Winona 19,714 Biloxi 5,467 Columbus 6,484 Greenwille 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chillicothe 6,905 Cliuton 5,061 Columbia 5,651 De Soto 5,611 Hannibal 12,780 Independence 6,971 Jopliu 28,023	3,711 3,849 6,291 5,321 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 3,373 4,547 7,981 5,77 4,737 4,000 12,857 6,380 12,857 6,380	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,269 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 30,647 Canandaigua 6,151 Catskill 5,434 Cohoes 23,910 Cohoes 23,910	8,656 8,156 181,830 18,844 113,028 78,347 7,105 5,122 8,644 11,207 7,105 4,330 57,465 11,665 3,785 6,185 94,923 17,336 22,500 4,926 22,500 8,550	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Akron Alliance Ashtabula Bedford Belefontaine Bowling Green Buckeye City Cambridge Canal Dover.	7,899 4.042 47,931 32,033 (OLINA. 14,694 10,235 18,091 11,555 7,910 4,338 6,679 5,487 6,348, 3,257 10,035 3,317 9,090 7,843 6,277 4.017 20,976 20,056 6,277 4.415 20,976 20,056 6,277 4.415 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,277 4.915 6,560 5,974 7,652 4.979 9,934 6,649 4,248 9,912 9,934 6,649 4,248 6,560 5,974 6,560 5,974 6,560 5,974 6,560 5,974 6,542 4,347	3 579B17738868 49 178457410
New Ulm 5,403 Owatonna 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 13,373 3,482 4,547 7,981 5,717 4,700 9,943 132,716 3,510	Morristown 11,267 Newark 246,670 New Brunswick 20,006 Orange 24,411 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,869 Rahway 7,035 Salem 5,811 South Aniboy 6,349 Trenton 73,407 Trion 15,187 West Hoboken 23,094 NEW MEXICO Albiquerque 6,238 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 39,647 Causandaigua 6,151 Catskill 5,484 Cohoes 23,910 Corning 11,041 Cortland 9,014 Cortland 9,014 Cortland 9,014 Order 10,41 Cortland 9,014 Cortland 9,014 Order 10,41 Cortland 9,014 Cortland 9,014 Cortland 9,014 Cortland 9,014	8,656 8,156 181,830 18,844 113,028 78,347 7,105 5,516 4,330 57,438 10,643 11,665 3,755 6,185 94,923 17,336 25,858 7,221 35,005 5,868 8,550 8,550 8,550	NORTH CAI Asheville Charlotte Concord Durham Edizabeth City. Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIC Akron Alliance Ashtabula Bedford Bellefontaine Bowling Green Buckeye City Cambridge Canal Dover. Canton	7,899 4.042 47,931 32,033 32,033 32,033 32,033 32,033 32,033 11,557 7,910 4,338 6,679 5,488 6,679 5,488 6,348, 5,257 10.035 3,317 10.035 3,317 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 8,018 4,728 27,601 8,974 73607 12,949 8,338 9,912 9,938 6,649 4,245 5,067 3,466 8,241 4,361 5,422 3,473 30,667 26,188	3 579B17738868 49 1784574109
New Ulm 5,403 Owatoma 5,561 Red Wing 7,525 Rochester 6,843 St. Paul. 163,065 Stillwater 12,318 Winona 19,714 Winona 19,714 Biloxi 5,467 Columbus 6,484 Greenwille 7,624 Jackson 7,816 Meridian 14,050 Natchez 12,210 Vicksburg 14,834 MISSOURI Aurora 6,191 Brooklield 5,484 Carthage 9,416 Chillicothe 6,905 Cliuton 5,061 Columbia 5,651 De Soto 5,611 Hannibal 12,780 Independence 6,971 Jopliu 28,023	3,711 3,849 6,291 5,321 133,156 11,260 18,208 3,234 4,559 6,658 5,92 10,624 10,101 13,373 3,482 4,547 7,981 5,717 4,700 9,943 132,716 3,510	Morristown 11,267 Newark 246,070 New Brunswick 20,006 Orange 24,141 Passaic 27,77 Paterson 105,171 Perth Amboy 17,699 Phillipsburg 10,052 Plainfield 15,269 Rahway 7,935 Salem 5,811 South Amboy 6,349 Trenton 73,407 Union 15,187 West Hoboken 23,094 NEW MEXICO Albuquerque 6,238 Santa Fe 5,603 Santa Fe 5,603 NEW YORK Albany 94,151 Amsterdam 20,929 Auburn 30,345 Batavia 9,180 Binghamton 30,647 Canandaigua 6,151 Catskill 5,434 Cohoes 23,910 Cohoes 23,910	8,656 8,156 181,830 18,844 113,028 78,347 7,105 5,516 4,330 57,438 10,643 11,665 3,755 6,185 94,923 17,336 25,858 7,221 35,005 5,868 8,550 8,550 8,550	NORTH CAI Asheville Charlotte Concord Durham Erizabeth City Goldsboro Greensboro Newbern Raleigh Salisbury Wilmington Winston NORTH DA Fargo Grand Forks. OHIO Akron Alliance Ashtabula Bedford Belefontaine Bowling Green Buckeye City Cambridge Canal Dover.	7,899 4.042 47,931 32,033 32,033 32,033 32,033 32,033 32,033 11,557 7,910 4,338 6,679 5,488 6,679 5,488 6,348, 5,257 10.035 3,317 10.035 3,317 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 6,277 4,918 20.976 20.056 8,018 4,728 27,601 8,974 73607 12,949 8,338 9,912 9,938 6,649 4,245 5,067 3,466 8,241 4,361 5,422 3,473 30,667 26,188	3 579B17738868 49 1784574109

STATISTICS OF POPULATION.

Cincînnati 325,90					
Cincinnatt 595 00). 1890.		1900.	1890.	1900. 1 890.
	2 296 908	Carnegie	7.330		Central Falls 18,1 7
Oinel mills 6 00	1 0 5 5 6	Chambardan	0 601		Concern E allower E all E acc
Oircleville 6,99 Cleveland 381,70 Columbus 125,5	1 0,000	Chambersburg .	0,000	7,863	Coventry 5,279 5,068
Cleveland381,70	8 261,353	(Charleroi	5,930		East Providence 12,138 8,422
Columbus . 125.5	0 88.150	Chester	33.988	20,226	Lincoln 8,937 20,355 Newport 22,034 19,45%
Connogut 7.1	2 2 2 11	Clearfield	5 001	2,248	Newport 22,034 19,45%
Conneaut	0,441	Clearfield Coatesville	0,001	4,440	1011 1011 10,40
Coshoctob 6,4	3 3.672	Coatesville	5,721	3,680	Pawrucket 39,231 27,633
Dayton 85.3	3 61,220	l Calumbia	19 216	10.599	Providence175,597 132,146
Dayton 85,3 Denance 7,5 Delaware 7,9 East Liverpool 16,4 Elyria 8,7 Findlay 17,6 Fostoria 7,7 Fremont 8,4 Gallipolis 5,4 Glenville 5,5 Greenville 5,5 Hamilton 23,9 Ironton 11,8	7 001	Connellsville	7 100		11'o mon F 100 4 400
Denance	9 7,694 10 8,221	Connensvine	1,100	5,628	Warren 5,108 4,489
Delaware 7.9	10 - 8.221	Conshohocken	5.762	5,740	Warwick 21,316 17,761 Westerly 7,541 6,813
Fact Livernool 16 4	5 10,956	Corry	5 369	5,677	Westerly 7,541 6,813
East Liverpoor 10,4	10,000	Colly	0,000	5,011	11 (2011) 1,041 0,010
Elyiia 8,7	5,611	Danville	8,042	7,998	Woonsocket 28,204 20,830
Findlay 17.6	3 18,553	Dubois	9.375	6,149	
Pagtorio' . 77	0 7 070	Dubois Dunmore	10 500	8,315	SOUTH CAROLINA.
L'OSLOTIA	7,070 9 7,141	Биншоге	12,000	0,010	Anderson 5,498 3,018
remout 8,4	19 1,141	Duquesne Easton	9,036		(1) and the Fr. 005 54 057
Gallon 7.2	32 6,32 6	Easton	25, 238	14,481	Charleston 55,807 54,955
Callinglia 5.4	2 4,498	Edwardsville	5 165	3,284	[COIII m D1a 21.108 15.353
Gampons 5,4	7,400	Edwardsville		0,404	
Glenville 5,5	33	Erie	52,133	40,634	Greenville 11,860 8,607
Greenville 5.50	11 • 5.473	Etna	5.384	-3,767	Rock Hill 5,485 2,744
Hamilton 92.0	1 17 505	Rugulelin	7 917	6,001	Spartanburg 11.395 5,544
11amilton 20,9	1 ·5,473 4 17,565	Frauklin	1,011	6,221 1,730	Sumter 5,673 3,865
Ironton 11,8	8 10,939	rreeland	5,254	1,7301	TI-2
Kenton 6,8	52 5,557	Greensburg	6.508	4,202	Union 5,400 1,609 SOUTH DAKOTA.
Langacton 8 0	1 7 555	Hanover	5 202	3,746	SOUTH DAKOTA.
Liancabuer 0,0	1,000	Tranover	0,502	3,170	Lead City 6,210 2,581
Lancaster 8,9 Lima 21,7	3 15,981	Harrisburg	50,167	39,385	
Lorain 16,0	8 4.863	Hazleton	14.230	11,872	Sioux Falls 10,266 10,177
Mansfield 17,6	0 13,473	Homostond	19 554	7,911	TENNESSEE.
	0 0 070	Homestead Huntington	0,004	F 700	
Marietta 13,3		reducington	0,053	5,729	Bristol 5,271 3,324
Marion 11,8	32 8 .3 27	Jeannette	5,865	3,296	Chattanooga 30.154 29,100
Martin's Ferry 7,7		Jeannefte Johnstown	35 936	21,805	
Moscillon 416	14 10 000	E one	5 200	0.044	Clarksville 9,431 7,924 Columbia 6,052 5,370
Massillon 11,9	10,092	Kane	5,296	2,944	Columbia 6,052 5,370
Middletown 92	5 7 681	Lancaster	41,459	32,011	Jackson 14,511 10,039
Monnt Vernon 6.6	6,027	Lebanon	17 628	14,664	15 non-111 00 007 00 507
Nolconvillo	1 4 550	Look Heren	7 910	7 250	Knoxville 32,637 22,535
Mount Vernon . 6,6 Nelsonville . 5,4 Newark . 18,1	1 4,558	Lock Haven McKeesport	1,210	7,358 20,741	Knoxville 32,637 22,535 Memphis102,320 64,495
Newark 18.1	7 14,270	McKeesport	34,227	20,741	Nashville 80,865 76,168
Newburg 5,9	9	McKees Rocks	6.352	1,687	
New Phila phia. 6,2	3 4,456	Mahanoy City		11,286	TEXAS.
		Mandaille		0 500	Angtin 90 000 14 576
Niles 7,4	0 4,209	Meadville		9,520	Austin 22,258 14,575
Norwalk 7,0	4 7,195	Middletown	5,608	5,080	Beaumont 9,427 3,296
Norwalk 7,0 Norwald 6,4	0	Millvale	6.736	3,800	Bonham 5 042 3 361
Poinoguillo 5.0	4 4,755	Millvale Milton	6 175	5,317	Breuliam 5,968 5,209
Painesville 5,0 Piqua 12,1	7,100	Billion	5,110		Dicinati 5,505 5,205
Piqua	2 9,090	Monongahela Mount Carmel	5,173	4,096	Brownsville 6,305 6,134
Portsmouth 17,8'	0 12,394	Mount Carmel	13,179	8,254	Cleburne 7,493 3,278
St Marv's 5.3	9 3,000	Nanticoke	12,116	10.044	Corsicana 9,313 6,285
St. Mary's 5,3 Salem 7,5	2 5,780	Now Putchton	6 920	5,616	Dallas 42,638 38,067
Salem	0,100	New Brighton	0,040		Danias 44,000 00,001
Sandusky 19,6	4 18.471	New Brighton	28,339	11,600	Denison 11,807 10,958
Sidney 5.6	8 4 850	Monnichorns	22 265	19,791	
		INOTTISTOWN		10,101	EL Paso 15,905 10,335
Springfield 38 2	8 4,850 3 31.895	North Braddock	6.535	10,101	El Paso 15,906 10,338 Fort Worth 26,688 23,076
Sidney 5,6 Springfield 38,2	3 31.895	North Braddock.	6,535		Fort Worth 26.688 23.076
Steubenville 14,34	9 13,394	Norristown North Braddock. Oil City	6,535 13,264	10,932	Fort Worth 26.688 23.076
Tiffin 10,99	9 13,394 9 10,801	Old Forge	5,630	10,932	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galvestop 37,789 29.084
Tiffin 10,99	9 13,394 9 10,801 22 81,434	Old Forge	6 180	10,932	Fort Worth 26,688 23,076 Gainesville 7,874 6,594 Galveston 37,789 29.084 Greenville 6,860 4,330
Tiffin 10,99	9 13,394 9 10,801 22 81,434	Old Forge	6 180	10,932	Fort Worth 26,688 23,076 Gainesville 7,874 6,594 Galveston 37,789 29.084 Greenville 6,860 4,330
Tiffin 10,99	9 13,394 9 10,801 22 81,434	Old Forge Olyphant Philadelphia1	5,630 6,180 1293697	10,932 4,083 1046964	Fort Worth 26,688 23,076 Gainesville 7,874 6,594 Galveston 37,789 29.084 Greenville 6,860 4,330
Tiffin 10,99	9 13,394 9 10,801 22 81,434	Old Forge Olyphant Philadelphia1	5,630 6,180 1293697	10,932 4,083 1046964	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27.557
Steubenville 14,36 Tiffin 10,9 Toledo 131,8 Troy 5,8 Urbana 6,8 Van Wert 6,4	9 13,394 9 10,801 22 81,434 1 4,494 08 6,510 2 5,512	Old ForgeOlyphant Philadelphia1 Phenixville Pittsburg	6,180 6,180 1293697 9,196 321,616	10,932 4,083 1046964 8,514 238,617	Fort Worth. 26,688 23,076 Gainesville 7,874 6,594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27,557 Langdo 13,429 11,319
Steubenville 14,36 Tiffin 10,9 Toledo 131,8 Troy 5,8 Urbana 6,8 Van Wert 6,4	9 13,394 9 10,801 22 81,434 1 4,494 08 6,510 2 5,512	Old ForgeOlyphant Philadelphia1 Phenixville Pittsburg	6,180 6,180 1293697 9,196 321,616	10,932 4,083 1046964 8,514 238,617	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,541 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207
Steubenville	31,895 9 13,394 19 10,801 22 81,434 4,494 18 6,510 22 5,512 19 5,973	Old Forge Olyphant	5,630 6,180 1293697 9,196 321,616 12,556	10,932 4,083 1046964 8,514 238,617 10,302	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,541 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207
Steubenville 14,36 Tiffin 10,9 Toledo 131,8 'Iroy 5,8 Urbana 6,8 Van Wert 6,4 Warren 8,5 Wash'ton C. H. 5,7	31,895 9 13,394 19 10,801 22 81,434 4,494 18 6,510 22 5,512 19 5,973 1 5,742	Old Forge. Olyphant Philadelphia 1 Phœnixville Pittsburg 3 Pittston Plymouth	5,630 6,180 1293697 9,196 321,616 12,556 13,649	10,932 4,083 1046964 8,514 238,617 10,302 9,344	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27.557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,838
Steubenville 14,36 Tiffin 10,9 Toledo 131,8 'Troy 5,8 Urbana 6,8 Van Wert 6,4 Warren 8,5 Wash'ton C. H 5,7 Wellston 8,0	31,895 9 13,394 10,801 22 81,434 6,510 86 6,510 22 5,512 19 5,742 4,377	Old Forge. Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown	5,630 6,180 1293697 9,196 321,616 12,556 13,649	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285	Fort Worth 26,688 23,076 Gainesville 7,874 6,594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,838 Paris 9,358 8,254
Steubenville	31,895 13,394 19 10,801 12 81,434 14,494 18 6,510 12 5,512 19 5,973 1 5,742 5,477 6 5,247	Old Forge. Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown	5,630 6,180 1293697 9,196 321,616 12,556 13,649	10,932 4,083 1046964 8,514 238,617 10,302 9,344	Fort Worth 26,688 23,076 Gainesville 7,874 6,594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,838 Paris 9,358 8,254
Steubenville	31,895 13,394 19 10,801 12 81,434 14,494 18 6,510 12 5,512 19 5,973 1 5,742 5,477 6 5,247	Old Forge. Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown	5,630 6,180 1293697 9,196 321,616 12,556 13,649	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,641 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673
Steubenville	31,895 13,394 19 10,801 12 81,434 14,494 18 6,510 12 5,512 19 5,973 1 5,742 5,477 6 5,247	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27.557 Laredo 13,429 11,319 Marshall 7,555 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335
Steubenville	31,894 99 13,394 99 13,894 99 13,894 14,494 11 4,494 12 5,512 12 5,512 12 5,742 13 5,742 14,377 15 5,247 16 5,247 16 7,301	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Savee	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27.557 Laredo 13,429 11,319 Marshall 7,555 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335
Steubenville	33 31,895 9 13,394 99 10,801 122 81,434 11 4,494 12 6,510 12 5,973 1 5,742 15 4,377 6 5,247 6 5,301 7,301 15 33,220	Old Forge Olyphant Philadelphia 1 Phenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre 5 Seranton 1	5,630 6,180 1293697; 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27.557 Laredo 13,429 11,319 Marshall 7,555 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335
Steubenville	33 31,895 9 13,394 99 10,801 122 81,434 11 4,494 12 6,510 12 5,973 1 5,742 15 4,377 6 5,247 6 5,301 7,301 15 33,220	Old Forge Olyphant Philadelphia 1 Phenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre 5 Seranton 1	5,630 6,180 1293697; 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27.557 Laredo 13,429 11,319 Marshall 7,555 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335
Steubenville	33 31,895 9 13,394 9 10,801 122 81,434 14,494 18 6,510 19 5,512 19 5,742 5,742 5,742 10 7,301 10 7,301	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton 1 Scranton 1 Shamokin	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,026 18,202	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 44,633 27.557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852
Steubenville	33 31,895 9 13,394 9 10,801 122 81,434 14,494 18 6,510 19 5,512 19 5,742 5,742 5,742 10 7,301 10 7,301	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Seranton 1 Shamokin	5,630 6,180 1293697: 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,026 18,202 8,918	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,541 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 3,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,665 4,047 Terrell 6,330 2,988 Texarkana 5,256 4,552 Tyler 8,069 6,598
Steubenville	33 31,895 9 13,394 10,801 122 81,434 4,494 183 6,510 22 5,512 9 5,742 15 5,742 16 7,301 16 7,301 16 7,301 18 33,220	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Seranton 1 Shamokin	5,630 6,180 1293697: 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,026 18,202 8,918	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 11,493 7,459 4,898	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Gaiveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,641 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852 Tvler 8,069 6,908 Waco 20,686 14,445
Steubenville	33 31,895 9 13,394 9 10,801 122 81,434 14 6,510 122 5,512 15 5,973 15 7,742 15 7,742 16 7,301 17,301 17,301 18 21,009 19 5,733	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottsville Reading Sayre Scranton 1 Shamokin Sharon Sharpsburg Shandah	5,630 6,180 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,026 18,202 8,918 6,842 20,321	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 45,944	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Gaiveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,641 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852 Tvler 8,069 6,908 Waco 20,686 14,445
Steubenville	33 31,895 9 13,394 9 10,801 122 81,434 14 6,510 122 5,512 15 5,973 15 7,742 15 7,742 16 7,301 17,301 17,301 18 21,009 19 5,733	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottsville Reading Sayre Scranton 1 Shamokin Sharon Sharpsburg Shandah	5,630 6,180 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,026 18,202 8,918 6,842 20,321	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 45,944	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,541 Houston 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,838 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852 Tyler 8,069 6,908 Waco 20,686 14,445
Steubenville	33 31,895 9 13,394 9 10,801 122 81,434 14 6,510 122 5,512 15 5,973 15 7,742 15 7,742 16 7,301 17,301 17,301 18 21,009 19 5,733	Old Forge Olyphant Philadelphia 1 Phenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton 1 Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem	5,630 (293697 9,196 12,5649 13,649 13,649 13,696 15,710 78,961 15,243 (02,026 18,202 8,918 6,842 20,321 13,241	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 45,944 10,302	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,641 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,838 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852 Tyler 8,069 6,908 Waco 20,686 14,445 Logan 5,451 4,555
Steubenville	3 31,885 9 13,394 10,801 12 81,434 14 4,494 18 6,510 12 5,512 19 5,973 1 5,742 5 4,377 6 5,247 3 5,901 6 5,247 3 21,009 16 5,733 17 4,151	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem Skelton	5,630 6,180 1293697 9,196 821,616 12,556 13,649 13,698 15,710 78,961 5,243 102,026 18,202 20,321 13,241 12,086	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 45,944 10,302	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Gaiveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,641 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852 Tvler 8,069 6,908 Waco 20,686 14,445 UTAH Logan 5,451 4,565 Ogden 16,313 14,889
Steubenville	3 31,885 9 13,393 19 10,801 11 4,494 12 81,434 13 4,494 14 4,494 15 6,510 12 5,512 15 5,732 15 5,742 15 6,524 16 6,731 16 7,311 16 5,733 17 4,151 18 6,184	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem Skelton	5,630 6,180 1293697 9,196 821,616 12,556 13,649 13,698 15,710 78,961 5,243 102,026 18,202 20,321 13,241 12,086	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,167 75,215 14,403 7,459 4,898 410,302 9,250 15,930	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Gaiveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,641 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852 Tvler 8,069 6,908 Waco 20,686 14,445 UTAH Logan 5,451 4,565 Ogden 16,313 14,889
Steubenville	3 31,885 9 13,384 19 10,801 11 4,494 12 4,494 18 6,510 19 5,572 10 5,747 10 5,747 10 6 7,301 10	Old Forge Olyphant Philadelphia 1 Phenrixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton 1 Sharnon Sharpsburg Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua	5,630 6,180 1293697 9,196 821,616 12,556 13,649 13,698 15,710 78,961 5,243 101,8202 8,918 6,842 20,321 13,241 12,086 9,810 7,267	10,932 4,083 1046964 8,514 238,617 10,302 14,117 58,661 75,215 14,403 7,459 4,898 45,944 10,302 10,302 5,940 10,302 6,930	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,541 Houston 14,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,838 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852 Tvler 8,069 6,908 Waco 20,686 14,445 UTAH Logan 5,451 4,655 Ogden 16,313 14,889 Provo 6,185 5,159
Steubenville	3 31,885 9 13,384 19 10,801 11 4,494 12 4,494 18 6,510 19 5,572 10 5,747 10 5,747 10 6 7,301 10	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Sharon Sharon Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 821,616 12,556 13,649 13,696 15,710 15,243 102,026 8,918 6,842 20,321 13,241 12,086 9,810 7,267 5,472	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,167 75,215 14,403 7,459 4,898 410,302 9,250 15,930	Fort Worth 26,688 23,076 Gainesville 7,874 6,594 Gaiveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,641 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,838 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,988 Texarkana 5,256 2,852 Tyler 8,069 6,908 Waco 20,686 14,445 UTAH. Logan 5,451 0,648 UTAH. Logan 5,451 4,655 Ogden 16,313 14,889 Provo 6,185 5,159 Salt Lake City 53,531 44,843
Steubenville	3 3, 885, 99 13, 384, 895, 99 13, 384, 494, 495, 496, 510, 29 5, 973, 31 5, 742, 56 5, 247, 32 5, 901, 65 5, 247, 41, 51 31 6, 1844, 33 2, 604, 46, 385	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 9,810 12,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 10,846 10	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Gaiveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,541 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,335 Temple 7,065 2,552 Terrell 6,330 2,988 Texarkana 5,256 2,552 Tvler 8,069 6,908 Waco 20,686 14,445 UTAH Logan 5,451 4,655 Ogden 16,313 14,889 Provo 6,185 5,159 Salt Lake City 53,531 44,843
Steubenville	3 3, 885, 99 13, 384, 895, 99 13, 384, 494, 495, 496, 510, 29 5, 973, 31 5, 742, 56 5, 247, 32 5, 901, 65 5, 247, 41, 51 31 6, 1844, 33 2, 604, 46, 385	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 9,810 12,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 10,846 10	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Gaiveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,541 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,335 Temple 7,065 2,552 Terrell 6,330 2,988 Texarkana 5,256 2,552 Tvler 8,069 6,908 Waco 20,686 14,445 UTAH Logan 5,451 4,655 Ogden 16,313 14,889 Provo 6,185 5,159 Salt Lake City 53,531 44,843
Steubenville	3 3, 885, 99 13, 384, 895, 99 13, 384, 494, 495, 496, 510, 297, 571, 297, 297, 297, 297, 297, 297, 297, 297	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 9,810 12,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 10,846 10	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth
Steubenville	3 3, 885, 99 13, 384, 895, 99 13, 384, 494, 495, 496, 510, 297, 571, 297, 297, 297, 297, 297, 297, 297, 297	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 9,810 12,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 10,846 10	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth
Steubenville	3 3, 885, 99 13, 384, 895, 99 13, 384, 494, 495, 496, 510, 297, 571, 297, 297, 297, 297, 297, 297, 297, 297	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 9,810 12,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 10,846 10	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth 26,688 23,076 Gainesville 7,874 6.594 Galveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5.346 2,541 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,337 Temple 7,065 2,552 Terrell 6,330 2,988 Texarkana 5,256 2,552 Tvler 8,069 6,908 Waco 20,686 14,445 UTAH Logan 5,451 4,655 Ogden 16,313 14,889 Provo 6,185 5,159 Salt Lake City 53,531 44,843 VERMONT. Barre 8,448 4,146 Bennington 5,656 3,971 Brattleboro 5,297 5,467
Steubenville	3 3, 885, 99 13, 384, 895, 99 13, 384, 494, 495, 496, 510, 297, 571, 297, 297, 297, 297, 297, 297, 297, 297	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 9,810 12,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 10,846 10	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth 26,688 23,076 Gainesville 7,874 6,594 Gaiveston 37,789 29.084 Greenville 6,860 4,330 Hillsboro 5,346 2,641 Houston 44,633 27,557 Laredo 13,429 11,319 Marshall 7,855 7,207 Palestine 8,297 5,338 Paris 9,358 8,254 San Antonio 53,321 37,673 Sherman 10,243 7,335 Temple 7,065 4,047 Terrell 6,330 2,983 Texarkana 5,256 2,852 Tyler 8,069 6,908 Waco 20,686 14,445 UTAH. Logan 5,451 0,685 VUTAH. Logan 6,185 5,159 Salt Lake City 53,531 44,843 VERMONT. Barre 8,448 4,146 Bennington 5,656 3,971 Brattleboro 5,297 6,467
Steubenville	3 31,885,9 13,384,99 10,801,99 10,801,91 10,801,11 11,434	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 9,810 12,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 2,086 9,842 10,846 10	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth
Steubenville	3 31,885,9 13,384,99 10,801,99 10,801,91 10,801,11 11,434	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 12,086 9,810 12,086 9,810 12,086	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth
Steubenville	3 31,885,9 13,384,99 10,801,99 10,801,91 10,801,11 11,434	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum	5,630 6,180 1293697 9,196 321,616 12,556 13,649 13,696 15,710 78,961 5,243 102,820 8,918 6,842 202 8,918 12,086 9,810 9,810 12,086 9,810 12,086 9,810 12,086	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 7,459 4,898 15,944 10,302 9,250 5,930 6,054 4,627	Fort Worth
Steubenville	3 3 1,885 9 13,384 99 10,801 19 10,801 19 10,801 11 4,494 11 4,494 18 6,510 12 5,512 19 5,733 1 5,74 15 1 6,730 1 6,730 17 4,151 11 6,184 13 2,604 16 46,385 14 14,383 23,337 16 4,383 33,337 16 4,383 33 7,348 34	Old Forge Olyphant Philadelphia 1 Phenrixville Pittsburg 3 Pittston 1 Pottstown Pottsville Reading Sayre Scranton 1 Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Warren Waynesboro West Chester	5,630 (6,180) (1293,697 (12),1616 (12),556 (13),649 (15),78,961 (15),78,961 (16),78,961 (17),78,961 (1	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 77,459 4,898 415,302 9,250 6,054 4,603 4,705 6,332 7,063 8,037 4,705 6,332 7,063 8,514 8,037 1,302 1,	Fort Worth
Steubenville	3 3 1,885 9 13,384 99 10,801 19 10,801 19 10,801 11 4,494 11 4,494 18 6,510 12 5,512 19 5,733 1 5,74 15 1 6,730 1 6,730 17 4,151 11 6,184 13 2,604 16 46,385 14 14,383 23,337 16 4,383 33,337 16 4,383 33 7,348 34	Old Forge Olyphant Philadelphia 1 Phenrixville Pittsburg 3 Pittston 1 Pottstown Pottsville Reading Sayre Scranton 1 Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Warren Waynesboro West Chester	5,630 (6,180) (1293,697 (12),1616 (12),556 (13),649 (15),78,961 (15),78,961 (16),78,961 (17),78,961 (1	10,932 4,083 1046964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 77,459 4,898 415,302 9,250 6,054 4,603 4,705 6,332 7,063 8,037 4,705 6,332 7,063 8,514 8,037 1,302 1,	Fort Worth
Steubenville	3 3, 885, 99 13, 389, 99 13, 389, 99 10, 801, 801, 801, 801, 802, 803, 803, 803, 803, 803, 803, 803, 803	Old Forge Olyphant Philadelphia 1 Phenrixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem Skeelton Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Waynesboro West Chester Weilesharre	5,630 6,180 1293,696 121,616 12,556 13,649 15,710 78,961 15,710 12,026 18,918 6,842 20,026 112,086 6,842 213,241 112,086 6,842 213,241 12,086 7,267 5,472 472 472 472 473 474 5,847	10,932 1,06964 8,514 238,617 10,302 10,302 14,117 58,661 75,215 14,493 7,459 4,898 15,944 10,302 9,250 6,359 4,627 4,705 6,359 7,063 3,811 8,018 8,514 11,107 12,215 10,302	Fort Worth
Steubenville	3 3, 885, 99 13, 389, 99 13, 389, 99 10, 801, 801, 801, 801, 802, 803, 803, 803, 803, 803, 803, 803, 803	Old Forge Olyphant Philadelphia 1 Phenrixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem Skeelton Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Waynesboro West Chester Weilesharre	5,630 6,180 1293,696 121,616 12,556 13,649 15,710 78,961 15,710 12,026 18,918 6,842 20,026 112,086 6,842 213,241 112,086 6,842 213,241 12,086 7,267 5,472 472 472 472 473 474 5,847	10,932 1,06964 8,514 238,617 10,302 10,302 14,117 58,661 75,215 14,493 7,459 4,898 15,944 10,302 9,250 6,359 4,627 4,705 6,359 7,063 3,811 8,018 8,514 11,107 12,215 10,302	Fort Worth
Steubenville	3 3, 885, 99 13, 389, 99 13, 389, 99 10, 801, 801, 801, 801, 802, 803, 803, 803, 803, 803, 803, 803, 803	Old Forge Olyphant Philadelphia 1 Phenrixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem Skeelton Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Waynesboro West Chester Weilesharre	5,630 6,180 1293,696 121,616 12,556 13,649 15,710 78,961 15,710 12,026 18,918 6,842 20,026 112,086 6,842 213,241 112,086 6,842 213,241 12,086 7,267 5,472 472 472 472 473 474 5,847	10,932 1,06964 8,514 238,617 10,302 10,302 14,117 58,661 75,215 14,493 7,459 4,898 15,944 10,302 9,250 6,359 4,627 4,705 6,359 7,063 3,811 8,018 8,514 11,107 12,215 10,302	Fort Worth
Steubenville 14,36 Triffin 10,3 Troledo 131,8 Troy 5,8 Urbana 6,8 Van Wert 6,4 Warren 8,5 Wash'ton C. H. 5,7 Wellston 8,0 West Alexandria 6,1 Woodville 6,0 Xenia 3,6 Youngstown 44,8 Zanesville 23,5 OKLAHOMA Guthrie 10,0 Oklahoma City 10,0 OREGON. Astoria 8,3 Baker City 6,6 Portland 90,4 PENNSYLVAN Allegheny 129,8 Allentown 35,4 Altoona 38,9 Archbald 5,3 Ashland 6,4 Beaver Falls 10,0 Bethlehem 7,2 Bloomsburg 6,1 Braddock 15,6 Braddock 15,6	3 3, 885, 99 13, 389, 99 13, 389, 99 10, 801, 801, 81, 821, 821, 821, 821, 821, 821, 821	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottsville Reading Sayre Scranton Shamokin Sharon Shamokin Sharon Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Warren Washington Waynesboro West Chester West Pittston Wilkesbarre Wilkinsburg Williamsport Vork	5,630 6,180 1293,696 121,616 12,556 13,649 15,710 78,961 15,710 12,026 18,918 6,842 20,026 112,086 6,842 213,241 112,086 6,842 213,241 12,086 7,267 5,472 472 472 472 473 474 5,847	10,932 1,06964 8,514 238,617 10,302 10,302 14,117 58,661 75,215 14,493 7,459 4,898 15,944 10,302 9,250 6,359 4,627 4,705 6,359 7,063 3,811 8,018 8,514 11,107 12,215 10,302	Fort Worth
Steubenville	3 3 1,885 9 13,389 9 10,801 19 10,801 19 10,801 11 4,494 11 4,494 18 6,510 12 5,512 19 5,732 1 5,742 5 4,377 6 5,247 3,166 7,301 6 5,733 220 18 21,009 16 6,733 30,337 4,151 16 105,287 30 6 4,032 30,337 16 4,355 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 10 10,614 10,614 10,614 10,614 10,614 10,614 10,614 10 10,8	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Sharon Sharon Sharon Shearpsburg Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Warren Washington Waynesboro West Chester West Pittston Wilkesbarre Wilkinsburg Williamsport York	5,630 (293697 93,196 12,556 13,696 15,769 15,702 8,918 60,842 13,241 14,241 14,	10,932 1,083 10,46964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 77,459 4,898 415,302 9,250 6,054 4,602 7,063 4,332 7,063 4,332 7,063 8,037 4,705 6,332 7,063 8,037 1,328 1	Fort Worth
Steubenville	3 3 1,885 9 13,389 9 10,801 19 10,801 19 10,801 11 4,494 11 4,494 18 6,510 12 5,512 19 5,732 1 5,742 5 4,377 6 5,247 3,166 7,301 6 5,733 220 18 21,009 16 6,733 30,337 4,151 16 105,287 30 6 4,032 30,337 16 4,355 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 10 10,614 10,614 10,614 10,614 10,614 10,614 10,614 10 10,8	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Sharon Sharon Sharon Shearpsburg Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Warren Washington Waynesboro West Chester West Pittston Wilkesbarre Wilkinsburg Williamsport York	5,630 (293697 93,196 12,556 13,696 15,769 15,702 8,918 60,842 13,241 14,241 14,	10,932 1,083 10,46964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 77,459 4,898 415,302 9,250 6,054 4,602 7,063 4,332 7,063 4,332 7,063 8,037 4,705 6,332 7,063 8,037 1,328 1	Fort Worth
Steubenville	3 3 1,885 9 13,389 9 10,801 19 10,801 19 10,801 11 4,494 11 4,494 18 6,510 12 5,512 19 5,732 1 5,742 5 4,377 6 5,247 3,166 7,301 6 5,733 220 18 21,009 16 6,733 30,337 4,151 16 105,287 30 6 4,032 30,337 16 4,355 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 10 10,614 10,614 10,614 10,614 10,614 10,614 10,614 10 10,8	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Sharon Sharon Sharon Shearpsburg Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Warren Washington Waynesboro West Chester West Pittston Wilkesbarre Wilkinsburg Williamsport York	5,630 (293697 93,196 12,556 13,696 15,769 15,702 8,918 60,842 13,241 14,241 14,	10,932 1,083 10,46964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 77,459 4,898 415,302 9,250 6,054 4,602 7,063 4,332 7,063 4,332 7,063 8,037 4,705 6,332 7,063 8,037 1,328 1	Fort Worth
Steubenville	3 3 1,885 9 13,389 9 10,801 19 10,801 19 10,801 11 4,494 11 4,494 18 6,510 12 5,512 19 5,732 1 5,742 5 4,377 6 5,247 3,166 7,301 6 5,733 220 18 21,009 16 6,733 30,337 4,151 16 105,287 30 6 4,032 30,337 16 4,355 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 10 10,614 10,614 10,614 10,614 10,614 10,614 10,614 10 10,8	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottstown Pottsville Reading Sayre Scranton Sharon Sharon Sharon Shearpsburg Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Warren Washington Waynesboro West Chester West Pittston Wilkesbarre Wilkinsburg Williamsport York	5,630 (293697 93,196 12,556 13,696 15,769 15,702 8,918 60,842 13,241 14,241 14,	10,932 1,083 10,46964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 77,459 4,898 415,302 9,250 6,054 4,602 7,063 4,332 7,063 4,332 7,063 8,037 4,705 6,332 7,063 8,037 1,328 1	Fort Worth
Steubenville	3 3 1,885 9 13,389 9 10,801 19 10,801 19 10,801 11 4,494 11 4,494 18 6,510 12 5,512 19 5,732 1 5,742 5 4,377 6 5,247 3,166 7,301 6 5,733 220 18 21,009 16 6,733 30,337 4,151 16 105,287 30 6 4,032 30,337 16 4,355 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 17 4,635 16 4,032 30,337 10 10,614 10,614 10,614 10,614 10,614 10,614 10,614 10 10,8	Old Forge Olyphant Philadelphia 1 Pheenixville Pittsburg 3 Pittston Plymouth Pottsville Reading Sayre Scranton Shamokin Sharon Sharpsburg Shenandoah S. Bethlehem Skeelton Sunbury Tamaqua Tarentum Titusville Tyrone Uniontown Warren Washington Waynesboro West Chester West Pittston Wilkiesbarre Wilkinsburg Williamsport York	5,630 (293697 93,196 12,556 13,696 15,769 15,702 8,918 60,842 13,241 14,241 14,	10,932 1,083 10,46964 8,514 238,617 10,302 9,344 13,285 14,117 58,661 75,215 14,403 77,459 4,898 415,302 9,250 6,054 4,602 7,063 4,332 7,063 4,332 7,063 8,037 4,705 6,332 7,063 8,037 1,328 1	Fort Worth

STATISTICS OF POPULATION.

19	00 1890.	1	1900.	1890. ı		1900.	1550.
Manchester 9,	715 9 246	Huntington	11.923	10.108	Manitowoe	11 786	7,710
		Martinsburg	7 564	7 996	Marinotto	16 105	
Newport News., 19,				1,440	Marinette	16,195	11,523
Notfolk 46,	624 34,871	Moundsville	5,362	2,688	Marshfield	5,240	3,450
Petersburg 21,	310 22,680	Parkersburg	11.703	8,408	Menasha	5.589	4.581
Portsmouth 17.		Wheeling		24 599	Menomonle	5 655	5,491
					Menomonie	0,000	
Richmond 85,	050 81,388	WISCONS	SIN.		Merrill	8,537	6,809
Roanoke 21,	495 16,159	1 = 12 ===	F 3.42	4 404	Milwaukee	185,315	204,468
Staunton 7,	289 6.975	Antigo	5,145	4,424	Milwaukee	5 954	5.083
Winehosten			15,085	11,000	Oconto	E CAC	E 910
Winchester 5,	161 5,196	Ashland	13.074	9.956	Oconto	0,040	0,419
WASHINGTO	NT.	Baraboo					22,836
	114.	Databoo	0,101				
Everett 7,	838	Beaver Dam,	b, 128				21 014
New Whatcom. 6,	091	Beloit	10.436	6.315	Sheboygan	20,102	10 250
Conttle Com.	834	Chippewa Falls.		8,670	Sheboygan	20,904	16,359
Seattle 80,	671 42.837	13 (32 - 1a					7,896
Spokane 36.	848 19,922	Eau Claire		エックエエの	Suparior	21 001	11,983
Tacoma 37,	714 36,006	Fond du Lac	15,110	12,024	Watertown	8 437	8,755
Walla Walla 10,	040 4.700		18.684	9,069	Waukesha	7 410	0,100
		Janesville	12 125	10 826	waukesna	7,419	6,321
WEST VIRGI	VIA					12.354	9,253
		Kaukauna			TUVOMI	ATC!	
Charleston 11,	099 - 6,742	Kenosha	11,606	6,532			
Fairmont 5,		La Crosse		25,090	Cheyenne	14.087	11,690
Grafton, 5,	850 2 150				Laramie		6,388
Oraconi determine D'	090 9,199	Madison	10,104	10,440	Lalamic	0,201	0,000

CHRONOLOGY OF PROGRESS IN ELECTRICITY.

[Data obtained from historical number of Electrical Review.]

(Data detailed in a	
Electric current discovered by Allesandro Volta1800	Continuous by Gram
Arc light produced by Sir Humphrey Davy	First telep New Hay
Induction discovered by Faraday1831 First electric road built by Thomas	Incandesce First centr In Pearl
Davenport of Brandon, Vt	Storage ba
Wheatstone and Cooke system of telegraphy invented	First prac
Zinc-copper battery invented by Daniell.1836 Submarine cable laid across Hoogly river.1839	First Europ lin by Si
First Morse telegraph line constructed1844 Printing telegraph system invented by	Electricity in New
Royal House	First long transmiss
First long submarine cable laid in Brit- lsh channel	mona, C Telautogra
Electrolytic copper refining invented by James Elkington	Heavy tra tives In The X-ray
Stearns' duplex telegraph system intro- duced	Konrad I
Edison's quadruplex system introduced1874 First modern electric road bullt by	Transatlan Dr. M.
George F. Greene of Kalamazoo, Mich. 1875 Telephone invented by Bell and Gray 1875	Improved biles inv

Continuous current dynamo discovered by Gramme		number of Electrical Review.]
New Haven, Conn	-	Continuous current dynamo discovered by Gramme
First central lighting station established in Pearl street, New York		First telephone exchange operated at New Haven, Conn
Storage battery, or accumulator, invented by Plante	-	First central lighting station established
First practical trolley line built by J. C. Henry in Kansas City		Storage battery, or accumulator, invent-
First European electric road built in Berlin by Siemens Bros		First practical trolley line built by J.
Electricity first used on elevated roads in New York		First European electric road built in Ber-
First long-distance, hlgh-voltage power- transmission plant installed at Po- mona, Cal		Electricity first used on elevated roads
mona, Cal		First long-distance, high-voltage power-
Heavy frains moved by electric locomotives in Baltimore		mona, Cal
The X-ray discovered by Dr. Wilhelm Konrad Roentgen		Heavy trains moved by electric locomo-
Road automobiles come into general use.1897 Transatiantic telephony made possible by Dr. M. I. Pupin		The X-ray discovered by Dr. Wilhelm
Dr. M. I. Pupin		Road automobiles come into general use.1897
biles invented by Edison1901		Dr. M. I. Pupin
		biles invented by Edison1901

STATISTICS OF FOPULATION:

POPULATION OF THE UNITED STATES AT EACH CENSUS (1850-1900).

[From the reports of the superintendents of the census.]

STATE OR TERRITORY.	1900.			1890.		1880.		1870.		1860.		1850.	
Alabama. Arkansas California Colorado. Connecticut. Delaware Florida	21 31 29	1,828,697 1,311.564 1,485.053 539,700 908,420 184.735 528,542 2,216,331	31 29 41	1,513,017 1,128,176 1,203,136 412,198 746,255 168,499 391,422 1,837,355 84,385 3,826,351 2,192,404 1,911,896 1,427,096 1,427,096 1,435,635 1,118,587 661,086 1,012,390 2,238,943 2,093,889 1,301,826	17 25 24 35 28 37 34 13	1,262,505 802,523 864,623 194,327 622,700 146,608 269,493 1,542,180	25 34	996,992 484,471 560,247 39,864 537,454 125,015 187,748 1,184,109	13 25 26 24 32 31 11	964,201 435,456 379,999 34,277 460,147 112,216 140,424 1,057,286	12 26 29 29 21 30 31 5	771,623 209,897 92,597 370,792 91,532 87,445 906,185	
Florida Georgia. Idaho Illinois Indiana. Iowa	8	161.772 4,821.550 2,516,462 2,231.853	43 3 8 10	84,385 3,826,351 2,192,404 1,911,896	4 6 10 20	3.077.871 1,978.301 1,624,615 996,096 1,648,696 939,946		2,539,891 1,680,637	6	1 211 071		851,470 988,416 192,214	
lowa Kansas Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippl Missouri Montana Nebraska	12 23 30 26 7 9 19	1,470,495 2,147,174 1,381,625 694,466 1,188,044 2,805,346 2,420,982 1,751,394 1,551,270	11 25 30 27 6 9 20	1,858,635 1,118,587 661,086 1,042,390 2,238,943 2,093,889 1,301,826	8 22 27 23 7 9 26	1,648,690 939,946 648,936 934,943 1,783 085 1,636,937 780,773 1,131,597 2,168,380	8 21 23 20 7 13 28	1,194,020 364,399 1,321,011 726,915 626,915 780,894 1,457,351 1,184,059 459,706	9 17 22 19 7 16 30	1,711,950 1,350,428 674,918 107,206 1,155,684 708,002 628,279 687,048 1,231,066 749,118 172,028		982,405 517,762 583,169 583,034 994,514 397,654 6,077	
Mississippl Missouri Montana Nebraska	20 5 41 27	1,551.270 3,106,665 243,329 1,066,300	21 5 42 26	1,289,600 2,679,184 132,159 1,058,910 45,761 376,530	18	1,131,597 2,168,380 452,402	18 5 	1,134,033 459,706 827,922 1,721,295		172,023 791,303 1,182,012 28,841		606,526 682,044	
Nevada. New Hampshire. New Jersey. New York. North Carolina. North Dakota.	36 16 15	42.333 411,588 1,883.669 7,268.894 1,893.810	45 33 18 1 16 39	376,530 1,444,933 5,997,853 1,617,947	38 31 19 1 15	452,402 62,266 346,991 1,131,116 5,082,871 1,399,750	37 31 17 1 14	122,993 42,491 318,300 906,096 4,382,759 1,071,361	12	6,857 32 6,073 67 2,035 3 ,880,735 992,622	19 10	317,976 489,555 3,097,394 869,039	
Ohio Oregon Pennsylvania. Rhode Island. South Carolina. South Dakota. Tennessee.		3,106,665 243,329 1,066,300 42,335 411,588 1,883,669 7,268,894 1,893,810 319,146 4,157,545 428,556 1,340,316 401,570	38 38 2 35 23 37	1,444,933 5,997,853 1,617,947 182,719 3,672,316 313,767 5,258,014 345,506 1,151,149 328,808 1,767,518 2,235,523 207,905 332,422 1,655,980	36 2 33 21	3,198,062 174,768 4,282,891 276,531 995,577	3 36 2 32 32 22	2,665,280 90,923 3,521,951 217,358 705,606	3 34 2 29 18	2,339,511 52,465 2,906,215 174,620 703,708	3 32 2 28 14	1,980,329 13,294 2,311,786 147,545 668,507	
Tennessee Texas Utah	13 6 40	401.570 2,020.616 3,048.710 276,749 343,641 1.854,184	18	328,808 1,767,518 2,235,523 207,905	12 11	1,542,359 1,591,749	9 19	1,258,520 818,579	10 23	1,109,801 604,215	1	1,002,717 212,592	
Tennessee	38 17 33 28 14	958.800	28	349.890		332,286 1,512,565 618,457 1,315,497		330,551 1,225,163 442,014 1,054,670		315,098 1,596,318 775,881	4	314,120 1,421,661 305,391	
Wyoming The states	34	2,069,042 92,531 74,610,523		762,794 1,6 86,880 60,705 62,116,811		49,371,340	••••	38,155,505		31,218,021		23,067,262	
AlaskaArizonaDakotaDist. of Columbia	7 6	63,592 122,931 278.718	6 5	59,620 230,392	— З 1	40,440 135,177 177,624	 9 8 1	9,658 14,181 131,700	 6 2	4,837 75,080	2	.51,687	
Hawaii	. 5	154,061 392,069	····· 2		8	32,610 39,159	7 6	14, 999					
Persons in service of the U.S. sta-	1	195.310 398,331	3 4	153,5°8 61,884	7 4	119,565	2	20,595 91,874	1	93,516		61,547	
Utah Washington					 5 9	143,963 75,116 20,789	5 10	86,786 23,955 9,118	5	40,273 11,594		11,380	
The territories		1.604.943		505,439		784,443		402,866		. 225,300		124,614	
United States		76,303,387		62,622,250		50,155,783		38,558,371		31,443,321		23,191,876	
Per cent of gain. 21.				24.9		30.08		22.65		85.58	35.86		

NOTE—The narrow column under each census year shows the order of the states and rerritories when arranged according to magnitude of population.

POPULATION OF THE UNITED STATES AT EACH CENSUS (1790-1840).

[From the reports of the superintendents of the census.]

STATE OR TERRITORY.	1840.		1830.		1820.		1810		1800.		1790.		
AlabamaArkansas California	12 25	590,756 97,574	15 27	309,527 30,388	19 25	127,901 14,273						- 	
Colorado Connecticut Delaware Florida Georgia	20 26 27 9	309,978 78,085 54,477 691,392	16 24 25 10	297,675 76,748 34,730 516,823	14 22 11	275.248 72,749		261,942 - 72,674 252,433	8 17 12	251,002 64,273 162,686	8 16 13	237,964 50,096 82,548	
Idaho	14 10 28	476,183 685,866 43,112	20	157,445 343,031	24 18	55,211 147,178	23	12,282 24,520	20	5,641	• • • •		
Kansas	6 19 13 15 8	779,828 352,411 501,793 470,019 737.699	8	687,917 215,739 399,455 447,040 610,408	7	564,317 153,407 298,335 407,350 523,257	5	406,511 76,556 228,705 380,546 472,040	9 14 7 5	220,955 151,719 341,548 422,845		73,677 96,540 319,728 378,787	
Michigau Minnesota Mississippl Missouri Montana	23 17 16	212,267 375,651 383,702	26 22 21	31,639 136,621 140,455	26 21 23	8,765 75,448 66,586	20	40,352 20,845	i9`	8,850		• • • • • • • • • • • • • • • • • • • •	
Nebraska. Nevada. New Hampshire. New Jersey. New York North Carolina. North Dakota.	22 18 1	234,574 373,306 2,428,921 753,419	18 14 1 5	269,328 320,823 1,918,608 737,987	15 13 1 4	244,161 277,575 1,372,812 638,829	16 12 2 4	214,460 245,562 959,049 555,500	11 10 3 4	183,858 211,149 589,051 478,103	9 5	141,885 184,139 340,120 393,751	
Obio Oregon Pennsylvania	3 2 24	1,519,467 1,724,033 108,830	4 2 23	937,903 1,348,233 97,199	5 3 20	581,434 1,049,458 83,059	13 3 17	230,760 810,091 76,931	3 16	45,365 602,365 69,122	2 15	434,373 68,825	
Rhode Island South Carolina South Dakota Tennessee Texas	11 5 21	108,830 594,398 829,210 291,948	9 7	581,185 681,904 280,652	8 9	502,741 422,823 235,966	10	415,115 261,727 235,981	15	345,591 105,602 154,465	7 17 12	249,073 35,691 85,425	
Vermont Virginia Washington West Virginia Wisconsin	29	1,239,797 30,945	8	1,211,405		1,065,366		974,600		880,200		747,610	
Wyoming The states		17,019,641		12,820,868		9,600,783		7,215,858		5,294,390			
Alaska	···i	43,712	 i	39,834	 i	33,039	1.	24,023	i	14,093			
Dist. of Columbia. Idaho		40,712		00,002						2 -, 000			
Oklahoma Utah Washington Wyoming													
The territories		43,712		39,834		33,039		24,023		14,093			
On public ships in service of U.S		6,100	-	5,318	-	0.000		EN 000 000		F 000 100		0.000.014	
United States Per cent of gain		17,069,453 32 6 7		33.55	33.06		36. 38		35.10		3,929,214		
			1				1		1				

Note-The narrow column under each census year shows the order of the states and territories when arranged according to magnitude of population.

						. 0121	30 (21	2000/	•			150
CITY.	1900.	1890.	1880.	1870. 69,422 53,180 21,789 267,354 250,526 18,939 117,714 39,634	1860.	1850.	1840	1830.	1820.	1810	1800	. 1790
Albany, N. Y	94.151	91,923	90,758	69,422	62,367	50,763	33 721	24,209	12,630	10, 762	5,34	9 3,498
Albany, N. Y Allegheny, Pa Atlanta, Ga	94,151 129,896 89,872 503,957 560,892	91,923 105,287 65,533 434,439	78,682	53,180	23,702	21,265	10,089	2,801				
Atlanta, Ga	89,872	65,533	31,409	21,789	9,554	2,572 169,034	102 212	90.620	62 739	16 555	00 51	112 500
Baltimore, Md Boston, Mass Bridgeport. Ct Buffalo, N. Y	560.892	448,477	362,839	250.526	177. 840	136.881	93.383	80,620	43.298	33, 250	24 73	13,503 718,038
Bridgeport. Ct	70,996 352,387 91,886	48.866 255,664	27,613	18,959	13,299	7,560	3,294	61,392 2,800 8,668	1,500	1,089	22,10	
Buffalo, N. Y	352,387	255,664	155,131	117, 714	81,129	42,261	18,312	8,668	2,095		1	1
Cambridge, Mass. Camden, N. J	75,935	70.028 58,313	52,669 $41,659$	39.634 20.045	26,060 14,358	15,215 9,479	8,409 3,371	6,072	3,295	2.328	2.45	2,115
Charleston, S. C.	55,807	54,955	49 984	1 48 956	401.522	9.479 42.985	29,261	30,289	24,780	24.711	18.92	16.359
Chicago, Ill	1,698,575	1,099,850	503.185	298,977 216,239	109,260	29,963	4.470					1
Cleveland, O	325,902 381.768	296,908 261,353			43,417	115,435 17.034	46.338 6,071	24.831 1,076	5,612 606	2,540		
Columbus, O	125.560	88 150	51,617	92,829 31,274	18,554	17.882	6,048	2,455				
Dayton, O Denver, Col Des Moines, Iowa			51,617 38.678 35,629 22,408 116,340	30,473 4,759 12 ,035	-20.0811	-10.977	6,067	2,435 2,950	1,000	383		
Denver, Col	133,859	106,713	35,629 29,409	4.759 12.035	4,749 3,965	502			*****	• • • • • •		
Detroit, Mich Duluth, Minn Frie, Pa Evansville, Ind Fall River, Mass.	285.704	205.876	116,340	79,577	45,619	21,019	9,102	2,222	1,422			
Duluth, Minn	52,969	33,115	0.455	0 1511								
Frie, Pa	52.733	40,634	27,737 29,280	19,646 21,830	9,419 11,484	5,858	3,412	1,465	635	394	81	
Fall River, Mass.	104 SEX	74.398	48,961	26,766	14.026	11.524	6,738	4,158	1,594	1,296		
GI.Rabius, Milch.	85.333 133,859 62,139 285,704 52,969 52,733 59,007 104,863 87,565 50,167	50,035 205,876 33,115 40,634 50,756 74,398 60,278 59,385 53,230	32.016	16.507	8,058	2,686 7,834						
Harrisburg, Pa Hartford, Conn	50,167	£9,385	30,762	23.104	13,405 29,152	7,834 17,966	5,980	4,312	2.990	2,287 3,955	1,472	
Indianapolis, Ind	79,850 169,164	105,436	42,015 75,056	37,180 48,244	18.611	8,091	9,468 2,692	7,074	4,726	5,000	5,347	
Indianapolis, Ind Jersey City, N. J. Kansas City, Kas	206,433	163,003	120.722	82,546	29,226	6,856	3,072					
Kansas City Kas	51,418	163,003 38,316	3,200 55 785		4 470							
Kansas City, Mo. Lawrence, Mass	163,752 62,559	132,716 44.654	39,151	32,260 28,921 5,728 100,753	4.418 17,639	8,282		• • • • • •				
Los Angeles, Cal.	102.479	50,395	11,183	5,728	4,385	1,610 43,194 33,883 14.257						
Los Angeles, Cal. Louisville, Ky	204,731 94,969	l 161.129l	123,758	100,753	68.033	43,194	21.210	10,341	4,012	1,357	359	200
Lowell, Mass	69 ,969 68 ,513	77,696 55.727	39,470	40 928 28 232	36,827	14 257	21,210 20,796 9,367	6,471 6,138	4 515	4,087	2 837	2,291
Lowell, Mass Lynn, Mass Memphis, Tenn	L 10≩.320	i bi.490i	33,592	40,226	22,623	8,841 20,031		0,100	1,010	2,001	2,001	
Milwaukee, Wis. Minneapolis Nashville. Tenn. Newark, N. J	102,320 235,375	201,468 164,738 76,168 181,830	59,475 38,274 33,592 115,587 46,887	28.233 40,226 71,440 13,036	19.083 22,623 45,246 2,564	20,031	1,712		• • • • • • • •			
Nashville Tonn	202,718 80,865 246,070 103,027	76 168	40,887	25.865	16 988	10.165	6.929	5.566		• • • • • •		
Newark, N. J	246,070	181,830	136,508	105, 059	71,941	38,894	17,290	10,953	6,507			
New Haven, Ct	103.027	81,298	43,350 136,508 62,882 216,090 1,206,299	50,8.0	39,267	20,345	12,960	10,180	7,147	5,772	4,019	
New York, N. Y.*	287,104 2000 287 2	242,039 1.515.301	210,020 1 206 299	191,418	108.075 813 669	515, 547	102, 193 312, 710	202, 589.	123.7069	6 373	0.515	33. 131
Oakland, Cal	66,960	.43,682	666,46	TOPOGRA	1.015							
Omaha, Neb	66,960 102,555 105,171	140,452	30,518	16,083	1,883	11 244	7 500					• • • • • •
Paterson, N. J Peoria, Ill	56,100	78.317 41,024	29 259	22 840	14 045	5 095	7,596	• • • • • • •				
Philadelphia Pal		1,046,964	817,170	674,022	565,529	121,376	1,467 93,665 21,115	80,462	63.802 7,248 8,581	3,722	1,220	28,522
Pittsburg, Pa	321,616	992 6171	156,389	86,076	49,217	46.601	21,115	80,462 12,568 12,598	7,248	4,768	1.565	0.022
Portland, Me	50,145	36,425 46,395	33,810	8 203	26.311	821	15,218	12,598				2,200
Pittsburg, Pa Portland, Me Portland, Ore Providence, R. I.	90,426 175,597 78,961 85,050 162,608 53,531 53,321 342,782 54,244 102,026 80,671	36,425 46,385 132,146 58,661 81,388 133,896	30,518 51,031 29,259 847,170 156,389 33,810 17,577 104,857 43,278	68.901	50,666	41,513	23,171	16.833	11,767 1 4,332 12,067	0.071 3,462 9,736	7,614	6,380
	78,961	58,661	43,278	33,930	23,162	15.743	8,410	5,856	4,332	3,462	2.386	3,761
Richmond, Va Rochester, N. Y Salt Lake City. U.	169,050 169,608	133 898	63.600 98,366	51.038 62,386	48,204	36,403	20,153 20,191	16.060 9.207	2,063	9,130	5,757	9,101
Salt Lake City. U.	53,531	41,843	-20,768	. 12.854	8.236							
San Antonio, Tex San Francisco	53.321	44,843 37,637	20.550	12,256	8,235	3,488 34,776 15,312	- COL	-				
San Francisco Savannah, Ga	542,782	298,997 43.189	233.959 30,709	28 235	56,802 22,292 9,223	15.312	500l.	7,776	7,523	5.215	5.165	
Scranton, Pa	102.026	75,215	45.850	35,092	9,223.							
Seattle, Wash	80,671	75,215 42,837	3.533	1.107	263	11 700	10,985	6.784	3,914	2,767	2 219	1 574
Springfield, Mass	102 070	44,179	83,340 32,431	26,7031 19,5561	15,199 8,932	11,766	10,985	0.134	5,314	2,101	2.012	1,013
St. Joseph, Mo St. Louis, Mo.†	62 059 102,979 575,238 163,065 108,374 131,822 73,307	44,179 52,324 451,770 133,156 88,143	83,340 32,431 350,5183 41,473 51,792 50,137	310,861	160.7731	77.860	16,469	14,125	10,049			
St. Louis, Mo.† St. Paul, Micn	163,065	133,156	41,473	20.030	10.401	1,112 22,271 3,829	11 014	6,929	1 814			
Syracuse, N. Y Toledo, O Trenton, N. J Troy, N. Y Utica, N. Y Washington, D.C.	131 822	81 434	51,792	31.581	28,119	3.829	11,014					
Trenton, N. J.	73,307	81,434 57,458	29,910	22,874	17.228	6.4611	4,035	3,925 11,556	3,942 .		4.000	
Troy, N. Y	60,651	60,956	55,747	46,465	39.2351	28,785 17,565	19,334	11,556	9 9791	3,895	4,926	
Weshington D.C.	60,651 56,383 278,718	44,007 230,392	33,914 177,624	28,804 [31,700]	22.529 75,080	51.687	12.782 33.745	8,323 30,261	23.3361	5, 471	8,144	
Wilkesbarre, Pa	51,721	37,718	23,339	10,174	4,235 21,258	51.687 2.723 13.979	1.718	2,232	755	1,225	835	
Wilkesbarre, Pa Wilmington, Del.	-76.5081	61,431	42,478	10,174	21,258	13,979	33,745 1.718 8,367 7,497	4,137	2,962	2 577	2 411	2 095
Worcester, Mass		84,655				17.049	ted ic	estima				
TURO NONDIOTIC	IN OF M.	OTT VOR	COLUMN TO	S 14 L. Tare	COLUMN TO THE	1 1 1 N. I. I I. I	FIGURE 1 1M	C 201/11/11/20	CHARLES AND V	DILL	12 4 4 4 1	VA VA

^{*}The population of New York city as at present constituted is estimated by the director of the census to have been: 1780, 49,401; 1800, 79,216; 1810, 119,731; 1820, 152,056; 1830, 242,278; 1840, 39,-114; 1830, 696,115; 1860, 1,174,779; 1870, 1,478,103; 1880, 1,911,633; 1890, 2,507,411; 1900, 3,437,202, †Prior to census of 1880 St Louis city was an undivided part of St. Louis county and its population was not separately reported. Previous to that year the population given is that of the city and county of St. Louis combined. Unofficial figures give St. Louis proper 1,400 population in 1810; 4,538 in 1820 and 6,634 in 1820











