# THE AMERICAN CRYSTAL PALACE.

THE American Crystal Palace! This subject has already entered into the speech of the nation. The daily press, and the numerous pictorial publications, have been emulously engaged in informing the people from time to time of its progress. The existence of something bearing this name, is, we presume, known to every one, and has entered largely into the thoughts and imaginings of the public.

Questions, no doubt, have been asked about it, and answered —questions as varied as the habits of the people. What is it ? Aye, what is it ? This question has been asked on the Brazos, and where the Oregon lists to his own dashings. And then, the ingenuity of the people, fresh and vigorous in free curiosity, has likened it to all that is wonderful under the sun,—to airy castles, magnificent green-houses, Oriental pagodas, Parisian bazaars, and scenes in dream-land. Distance and pictures are illusive.

We propose in this article to arrest these imaginings, and do something towards giving the people a just conception of the subject. We propose, as far as possible, to define it, so that it may become a well-known epoch in the history of the family, as well as in the history of the nation. In doing so, we must make a call upon the faith and imagination of the reader. By a free exercise of these, he will be able to follow us, and form a clear and satisfactory view of the American Crystal Palace.

We are in New-York. It matters not from whence we have come, or how we have reached the mercantile metropolis of our country. It matters not whether we have come from the Granite State, the flat savannas white with downy cotton, the grassy prairie that skirts the far-off tributaries of the Mississippi, or El Dorado—the Ophir of the New World. We are in New-York, and wish to see and know the American Crystal Palace for ourselves. The first step is taken in reality, or in imagination.

We pause here to lay down a principle, or rather indicate its importance. The artist, when about to exhibit his work, is desirous to place it in a good light. The tourist, about to visit some noted landscape, wishes above all to see it through a clear atmosphere. The visitor, who hopes to see the Crystal Palace as favorably as possible, should be as desirous of a good light as the artist, and as eager for a clear atmosphere as the tourist. There is a darkness of ignorance, and a haze of prejudice, that are unfavorable to just impressions. And these, in all probability, exist in some degree in the majority of cases.

It need not be concealed that there are two distinct parties in the nation, even in matters of art. The Native American is too generally extreme in self-confidence, and by a somewhat indiscriminate praise of his country, awakens the educational biases and first loves of the Naturalized Citizen. Foreign opinion and foreign journals do much to increase and perpetuate this state of things. I do not allude here to the *London Times*. Who respects that over-fed issue i Its influence upon our opinion is about as great as our respect for it. A paper so vacillating, and so imbued with the worst features of European ar:stocracy and diplomacy, is as incapable of understanding our institutions, or appreciating their results, as a capricious despot is incapable of understanding truth and justice. Even our ladies spurn it as an unclean thing, intuitively apprehending its vice, and despising its unmanliness.

We add another concession. It need not be concealed that there is a tendency in almost every mind, and especially in every nation, to magnify their own works. We share in this infirmity. Perhaps, we share largely in it. Conscious of mighty resources, unchained energies, and the promise of no second future, we may be pardoned if we speak of ourselves. In the present case, we wish to check this propensity, and, if possible, moderate its ardor. We wish to look at ourselves in our just relations. We wish to visit and examine the American Crystal Palace as such, and weigh its claims as an Exhibition of THE INDUSTRY of all Nations.

The thought, no doubt, has arisen from time to time in the minds of many, that there can be but one Crystal Palace pre eminently, and that one is now the subject of history. Its re appearance at Sydenham, enlarged and beautified, and its free imitations at Dublin and New-York, do not bring it back again. The London Crystal Palace, in the nature of things, gathered about it an array of interest altogether new, commanded an unprecedented share of public attention, and received such a generous admiration, as no other one can possibly command.

The English Crystal Palace, it must be admitted, is the original, and all others are only imitations. It matters not how well and how faithfully they are executed. It matters not how much inventive genius has been taxed to vary or perfect that original. The comparison is not, and cannot be, between points of excellence, but between originality and imitation. Inven tion, and genius, and taste, and opulence, can produce nothing in this line that is fitted to awaken such a fresh interest, and carry the popular mind to such a state of enthusiasm, as that witnessed and recorded of the Crystal Palace in Hyde-Park. The charm of novelty and imagination was dissolved at its close. Its projection was a wonder, its execution was a tri umph, its inauguration was a fulfilled dream of the union of the arts of peace; and when it closed, and the place it graced became again vacant, there was at least the sense

# "Of what has been, and never more shall be."

These thoughts are thrown out, not to depreciate our ow enterprise, or cast discredit upon imitative art, as if individuaand nations must forbear efforts to be great or good, when they cannot be original. They are simply our own initiatory thoughts, awakened by the origin and history of our own Crystal Palace.

Originals, in the very nature of things, must be few. Originals that mark epochs in human progress, can occur only occasionally. The Crystal Palace in Hyde Park, we regard as one of these originals. Centuries prepared the way for its production. It marks the epoch of the union of the arts of peace; and from it, the industry of all nations will date its reign. Henceforward, the men of service are to date their knighthood as the true nobility. Minor epochs may be marked by minor events. The Dublin, and Manchester, and New-York, and Paris Crystal Palaces can only do for localities and nations what the London one did for the world.

If these considerations are justly weighed, they will go far to place the subject of Crystal Palaces in its true light, and allay national jealousies. England, in the course of things, has, on this subject, the start of all other nations. We can only repeat and vary what she did. It becomes us to do so intelligently, and with a consciousness of self-respect. There is no need of feverish comparisons—comparisons of receipts and interest. All such comparisons are injudicious, and betray a want of olservation and acquaintance with the laws of the mind and popular enthusiasm. There remains to us only one point of ambition, and that is *excellence*. It is denied to us to be original on the subject of Crystal Palaces. It is not denied to us, however, to perfect on the past, till the laws of human perfection are exhausted, and the limits of the human mind are reached.

These considerations, which in some form or other, must have passed through every reflecting mind, will, unless we are much mistaken, aid us in our visit to the American Crystal Palace; and, perhaps become that light in which it should be seen.

We are ready for the visit; and for this purpose, select the morning hour. The Sixth-Avenue railroad is taken at Chambers-street, and after winding and turning in and out of streets for about half an hour, the top of the Latting Observatory meets the eye. A little nearer, and thrift seems to have perished. A block of shantees is shut up, houses in all quarters are closed, a retributive reverse in the speculations of moneychrogers and dealers in the fiery cup. But the Palace is in sight. Its beautiful dome catches and pleases the eye; and in a few moments more, its whole form fills the vision.

We are at Reservoir Square, the site of the Crystal Palace. It is useless now to express any dissatisfaction, or speak of strangeness of taste. It is so; and ponderous walls of masonry rise to guard its rear, and shield it from the rude assaults of easterly storms. They stand in unneighborly proximity, and rob this beautiful structure of half its effect, by an extreme antithesis between the *airy* and *cave* form of building, as if ethereal beauty had reared for herself a home within the shadows of the tombs.

#### RESERVOIR SQUARE.

Reservoir Square lies in the north-western part of the city, four miles distant from the Battery, and three and a quarter 'rom the City Hall. The distance from the Reservoir to Sixth Avenue is 445 feet, and the distance from Fortieth street which is on the south, to Forty-second street which is on the north, is 455 feet. This square of 212,475 square feet is almost wholly occupied with the building of the Crystal Palace.

We will walk around it and take a general survey of the exterior before we enter. The character of the ground is altogether unfavorable to architectural effect. It is a spot without any physical recommendation. But we are willing to forget these things, and the solid and imposing strength of the reservoir. The graceful structure is before us, and impresses us with a happy union of the airiness of tropical regions with the delicate, intellectual taste of a temperate climate. As we gaze upon it, other thoughts come into the mind. The gloom of the Gothic order of architecture has passed away, and yet, in ribs and lattice work of iron, we have resemblances that recall all its better associations.

## THE BUILDING.

The leading and central idea embodied in the building is that of a Greek Cross, whose arms, 365 feet 5 inches long, and 149 feet 5 inches wide, range almost with the cardinal points of the compass, and are surmounted by a dome at their intersection.

This central idea, however, is modified by the details of the structure. The triangular intervals between the arms of the cross are filled up with a lean-to of one story in height, giving us a regular octagon for the ground plan, whose diameters are the same as the arms of the cross.

The dome, which rises over the intersection of the cross, is, both on the exterior and interior, the grand architectural feature. Its diameter is 100 feet, and its height to the springing line nearly 70 feet, and to the crown of the arch 123 feet. The effect of this part of the building is noble, and lends a charm to the whole structure.

Three ideas enter into the building, as may be seen from this brief outline: the *Greek Cross*; the *Octagon*, for the ground plan; and the *Dome*.

We may now examine more minutely the details. The external walls of the building are formed of cast-iron framing and panel-work, into which are inserted window-sashes, glazed with enameled glass, and louvres for ventilation. At each angle of the building, there is an octagonal tower, 8 feet in diameter, and rising to the height of 76 feet. In these, we find winding stairways, which lead to the galleries and roofs, and are designed for the use of the officers.

We pass now to the interior. We enter through the entrance hall on Sixth Avenue. The eye is at first bewildered with the array of objects and columns, breaking the view by endless intersections. There are 190 cast-iron columns on the groundfloor, 8 inches in diameter, and 21 feet in height. They divide the interior into two avenues or naves, 41 feet 5 inches wide, with aisles, 54 feet wide, on each side. These naves, at their intersection, leave an octagonal space of 100 feet in diameter. This is only part of the columnar division. They subdivide the aisles and the triangular spaces between the arms of the cross into square and half-square divisions of 27 feet on the side.

The aisles, thus formed, are covered with galleries, and united by broad sections at the extremities of the naves or avenues. The naves are raised above the roofs of the galleries to admit light. They are spanned by 16 semi-circular arches of cast-iron.

The dome is supported by 24 columns, which rise to the height of 62 feet, and are connected at the top by wrought-iron trusses. They receive a cast-iron bed-plate, with cast-iron shoes for the ribs of the dome, 32 in number. These ribs are bolted at the top to a horizontal ring of wrought and cast-iron, 20 feet in diameter, and surmounted by the lantern, through which, and 32 ornamental windows, glazed with stained glass representing the Arms of the Union and the several States, light is communicated to the interior.

As we pass along, and glance at the 190 columns on the ground floor, the eye rests on cast-iron girders, 3 feet wide, and some of them 26 feet 4 inches long. Those of wroughtiron are 40 feet 9 inches long. The first tier of girders sup ports the floors of the galleries, and braces the whole structure. The number is 252. The second story contains 148 columns, 17 feet 7 inches high. They rest on those of the ground floor. These columns receive 160 girders, which support the roofs of the aisles. The roofs, it may be remarked in this connection, are constructed of boards, matched togéther and covered with tin, and supported on arches or girders by means of wroughtiron trusses.

From the examination of the details of the structure, we turn with pleasure to the *decorations* of the building. This part of the work was entrusted to Henry Greenough, Esq., brother of the sculptor, and is admirably executed. It is in harmony with the structure. The interior has a tone of buff, or cream color, agreeably relieved by the use of red, blue, and yellow; the exterior has the appearance of a light-colored bronze, the ornamental features of which are of gold.

The effect of the interior decoration is charming. As we gaze up into the dome, the rays from a central golden sun stream down the latticed ribs, and arabasques of blue and white, relieved by the gleam of silver stars.

From the contemplation of the structure itself, a noble monument of art, we turn for a moment to think of the materials, and recall its general dimensions.

The whole quantity of iron employed in the construction amounts to 1,800 tons; of which 300 tons are wrought, and 1,500 tons cast iron. The quantity of glass is 15,000 panes, or 55,000 square feet. The quantity of wood used amounts to 750,000 feet, board measure.

To complete our explanation of the construction of the building, we recapitulate its principal dimensions, and annex a few references to the diagrams:

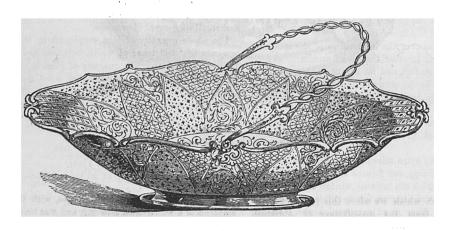
PRINCIPAL DIMENSIONS.									FT.	IN.
From	n principal :	Floor t	o Gal	ller	y F	loor,			24	
"	- "	" t	o top	of	2d	tier	of	Girders, .	44	. 4 <del>8</del>
"	**	"t	o top	of	3d			"	59	10
"	**	"	o rid	ġe d	of l	Vave	•		67	4
"	**	·" t	o top	of	Be	d·pla	ate,		69	11
"	**	" t	o top	o of	' up	per	rir	ng of Dome,	123	6
"	Sixth Ave	nue cu	ırb-st	one	to	top	of	Lantern, .	151	
"	"	¢	"		to	top	of	Towers, .	76	9
	Area of fire	t floor,	•		•	•	•	157,195 sq. :	feet.	
	" 2d	**	•			•	•	92,496 "		
	Tota	l area,	•		•		• ,	249,691, or	5¥ ព	cres



AN AMAZON ON HORSEBACK ATTACKED BY A TIGER.

The group exhibited at the American Crystal Palace is a copy of the far-famed colossal bronze original by Kiss, which adorns the entrance to the Royal Museum at Berlin. It was cast in zinc at the foundry of Geiss, and bronzed by a deposit of copper, cast upon the surface by galvanic action.

The Amazon on Horseback attacked by a Tiger is a work of the highest merit. It is supposed by some that the unity of the action in this group is broken. Three agents are exhibited in action; but the actions of the horse and tiger are so subordinated to the action of the Amazon as to become a part of it —a harmony of complex action, in which unity is forced upon the mind in the most impressive manner by the terrified but controlled and effective purpose of the Amazon.



#### SILVER BASKET.

This is a contribution of Mr. Joseph Angell, Strand, London, well known as a manufacturer and designer of silver ware. It 18 a fine piece of workmanship, chastely wrought, and pierced in imitation of antique silver ware.



RETURNING FROM THE VINTAGE,

The illustration with which we adorn this page is that of a group in Parian, from the manufactory of Alderman Copeland, of London—The Return from the Vintage. The group consists of seven figures, with the appropriate emblems of a well-known festivity, and was modelled from the original, lately in the possession of the Earl of Lichfield. Having thus taken a general survey of the building, and looked somewhat minutely at the details of its structure, we may now walk through the aisles and courts, and examine the objects in the Exhibition—The INDUSTRY OF ALL NATIONS. Here the visitor, for the first time, is bewildered, and in the seemingly endless display of human skill, wanders up and down with an unmeaning and purposeless look. He treads the mazes of art, and has no clue to guide his thoughts "in wanderings lost."

It may be well enough for the first time to do so, and leave the building with an aching head, weary step, and confused impression of the scene. The great number and variety of the objects will continue to bewilder the visitor, unless, guided by some plan, he begins to divide and classify them. Then they will appear in order, and may be studied with pleasure and profit. This plan is happily furnished by the classification of the London Commissioners, which has been adopted in the arrangement of the American Exhibition, with a few changes.

## THE CLASSIFICATION.

All the articles in the Exhibition are divided into four departments, or sections, and these again into thirty classes.

- SECTION I.—Raw Materials and Produce; embracing Classes:
  1. Minerals, Mining, and Metallurgy, and Geological and Mining Plans and Sections.
- 2. Chemical and Pharmaceutical Products and Processes.
- 3. Substances used as Food.
- 4. Vegetable and Animal Substances employed in Manufactures. SECTION II. — Machinery for Agricultural, Manufacturing, Engineering, and other purposes, and mechanical inventions illustrative of the agents brought to bear by human ingenuity
- on natural products; embracing Classes: 5. Machines for direct use, including Steam, Hydraulic, and Pneumatic Engines, and Railway and other Carriages.
- 6. Machinery and Tools for manufacturing purposes.
- 7. Civil Engineering, Architectural and Building Contrivances.
- 8. Naval Architecture, Military Engineering, Ordnance, Armor, and Accoutrements.
- 9. Agricultural, Horticultural, and Dairy Implements and Machines.

10. Philosophical Instruments, and Products resulting from their use, (for example, Daguerreotypes, &c.,)

- 10. | Maps, and Charts.
  - 10A. Horology.

(10B. Surgical Instruments and appliances.

SECTION III.—Manufactures—the result of human industry on natural products; embracing Classes:

- 1. Manufactures of Cotton.
- 12. Manufactures of Wool.
- 13. Manufactures of Silk.
- 14. Manufactures of Flax and Hemp.
- 15. Mixed Fabrics, Shawls, Vestings, &c.
- 16. Leather, Furs, and Hair, and their Manufactures.
- 17. Paper and Stationery, Types, Printing, and Bookbinding.
- 18. Dyed and Printed Fabrics, shown as such.
- 19. Tapestry, including Carpets and Floor Cloths, Lace, Em-
- broidery, Trimmings, and Fancy Needlework.
- 20. Wearing Apparel.
- 21. Cutlery and Edge Tools.
- 22. Iron, Brass, Pewter, and General Hardware, including Lamps, Chandeliers, and Kitchen Furniture.
- Work in Precious Metals and their Imitations, Jewelry and other personal ornaments; Bronzes, and articles of Vertu generally.
- 24. Glass Manufactures.
- 25. Porcelain and other Ceramic Manufactures.
- 26. Decorative Furniture and Upholstery, including Papier Maché, Paper Hangings, and Japanned Goods.
- 27. Manufactures in Marble, Slate, and other Ornamental Stones, Cement, &c., for Construction and Decoration.
- 28. Manufactures from Animal and Vegetable Substances, not woven or felted, or otherwise specified.

29. Miscellaneous Manufactures and Small Wares, Perfumery, Confectionery, Toys, Taxidermy, &c.

30. Musical Instruments.

SECTION IV.—Class 31.—Fine Arts, Sculpture, Painting, Engravings, &c.—An additional class was added to the London list, in consequence of the important branch of industry carried on, especially in this country, in the manufacture of Musical Instruments,—a class which will present one of the finest fea tures of the Exhibition.

#### THE DISTRIBUTION OF SPACE.

The total amount of space on the floor occupied by different countries for exhibition, exclusive of the naves, is about 152,000 square feet, of which 94,102 is on the ground floor, and 59,000 is in the gallery. This space is divided as follows:

	Ground Floor.	Gallery.
England	10,570	7,081
Switzerland		2,970
Zollverein	6,196	6,053
Holland and Belgium		729
Austria		729
Denmark, Sweden, and Norway	2,916	1,315
Russia, &c		•
British Guiana, and West Indies		
British Colonies		8,429

The total amount of space occupied by foreign countries is 98,749 square feet.

The United States contributions occupy 34,585 square feet on the ground floor, and 19,945 square feet in the gallery.

The total number of exhibitors from abroad are 2,605, of which

England sends677	Italy185
France	Sweden and Norway 18
Switzerland116	West Indies 3
Zollverein	Prince Edward's Island 15
Holland and Belgium155	Nova Scotia 2
Austria100	

This list will be somewhat larger; the local Committees of Canada have not yet sent in their list of contributors, and it does not include quite a number from British Guiana. A small number of Turkish and other contributors are also to be added, making the sum total of foreign exhibitors not far from 2,700.

In the United States, the number of exhibitors is 1,778, the largest portion of whom come under Classes 1, 5, 6, 9, 22, and 81, and applications have been received since the 1st of March, amounting to over 400, which have not been acted on for want of space.

The total number of exhibitors, both foreign and American, is 4,883; about *one-fourth* the number contributing to the London Exhibition.

After the general survey of the building and exhibition which we have taken, it may be well to pause, and even dismiss the subject for awhile. The mind tires in the attempt to contemplate great variety, and unless aided by a simple classification and method, soon becomes weary, and regards the whole as unprofitable. It is necessary to be initiated. It is necessary to be prepared for the examination of the exhibition, or we will wander among its multifarious objects as the illiterate wander in a vast library, and stand in their glare as the rustic stands beneath the twinkling orbs of heaven. We will shift for this purpose the scene, and glance at

#### THE HISTORY OF THE AMERICAN CRYSTAL PALACE.

The point of departure which is naturally suggested, is the *inauguration*, the 14th of July, 1853. From that point of time, and from the site of the Crystal Palace, those who were then present, or who have been or will be present, or those who never may see the building or its contents, may look back upon the progress of the INDUSTRY OF ALL NATIONS. Supposing ourselves to be among the crowd, and to form part of the scene so well depicted in the frontispiece, let us look back and contemplate the events that made that great event.

The INAUGURATION, we are free to confess, scarcely met the

expectations of any. This is a concession which we owe to self-respect, as much as to truth. We do not speak of the want of "pomp and circumstance." Such a want is no blemish in republican institutions, the spirit of which requires that individual man be the central object. We speak of incomplete arrangements, and the absence of that propriety which befits the time, and place, and occasion. Never, we are bold to say, have we seen an inauguration so wanting in this respect. The grand idea, The INDUSTRY of all NATIONS, did not control and regulate, as it should have done, the movements and services of the day.

But we pass on to notice and chronicle the events and agents in the production of THE AMERICAN CRYSTAL PALACE.

1. The *plan* of the building is embodied before us, and is that of Messrs. Carstensen and Gildemeister. It was selected on the 26th of August, 1852, in preference to those submitted by Sir Joseph Paxton, of Chatsworth; the late Mr. Downing; and Messrs. Bogardus and Hoppin.

2. The corps of engineers and architects which carried out this plan was organized about midsummer of last year, by the appointment of Mr. C. E. Detmold as Superintending Architect and Engineer; Mr. Horatio Allen, Consulting Engineer; and Mr. Edward Hurry, Consulting Architect.

3. The municipal authorities of New-York, on the 3d of January, 1852, granted a lease of Reservoir Square for five years, and thus furnished the site of the building.

4. The legislature of the State of New-York, upon application, granted on the 11th of March, 1852, the charter under which the Association for the Industry of all Nations has been organized and carried forward.

5. The Board of Directors met on the 17th of March, 1852, and was organized by the appointment of Theodore Sedgwick, Esq., as President, and William Whetten, Esq., as Secretary.

6. The General Government gave countenance and aid to the institution, in permitting the introduction of foreign goods into the exhibition free of duty.

7. The late Daniel Webster lent his influence, and as Secretary of State, secured the aid of the representatives of the United States at the chief courts of Europe.

8. The ministers of foreign powers, residing in the United States, sympathized warmly with the Association, and expressed themselves favorably for their respective governments.

9 The chief foreign newspapers, and the daily journals published in German and French in the United States, cordially lent their services to the cause.

10. The American press, with few exceptions, has put forth, from time to time, no second influence in carrying forward and completing the Exhibition.

11. Mr. Charles Bushek, of London, the Agent of the Association in carrying out its foreign relations, has fully discharged the delicate and important trust reposed in him.

12. The London Crystal Palace cannot very well be overlooked in this connection. It must be regarded as the great suggestive agent, without which, all the others would have been without an occasion and guide for their activity.

Beyond this, however, we are forced to look for other influences and agents in the production of the American Crystal Palace, —the Observatory at Chatsworth, the Parisian fairs for the exhibition of national products, and the Eastern bazaars. The whole progress of the Arts of Peace has been preparing the way for it, in order to throw bonds of true amity around the nations, and introduce a worthy order of nobility, the men of service.

We return from this historic survey, and again witness the INAUGURATION. The ceremony closes, and a few hours are passed in sauntering among unpacked boxes, and gazing here and there upon a statue, or a partially completed court. Who is to educe order? Who is to preside in the Exhibition, and complete it by the addition of system and a natural classification?

#### THE EXECUTIVE DEPARTMENT.

The charge of the interior of the building, in the division of its space, the classification of its articles, their distribution, its police and administration, was intrusted to Captains S. F. Dupont and Charles H. Davis, of the United States Navy.

They organized their department by the following appoint ments:

J. M. Batchelder, Secretary of the Superintendents.

Samuel Webber, Arrangement of Space and Classification.

Prof. B. Silliman, Jr., Mineralogy and Chemistry.

B. P. Johnson, Agricultural Implements.

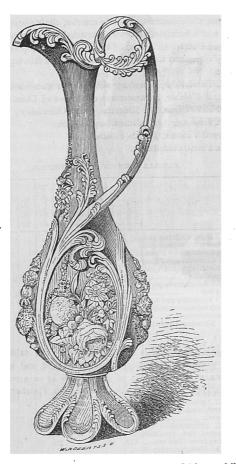
Edward Vincent, Textile Fabrics.

Felix Piatti, Sculpture.

TABULAR	VIEW	OF	THE	EXHIBITION.

	United States.	Great Britain.	Zollverein & Germany.	Belgium.	France.	Switzerland.	Holland.	Austria.	Italy.	British Possessions.
Class I. Minerals, Mining and							-		<u> </u>	
Metallurgy; Geological and Mining Sections and Plans.							1			
Class II Chemical and Phar-										
maceutical Products and Processes	51	17	89		16	• 1	5	7	10	18
Class III. Substances employ-	79	13				-				
ed as Food Class IV Vegetable and Ani-	19	10	15	1	22		8	1	17	28
mal substances employed in Manufactures	54	12	10				10		10	
Class V. Machines for direct			12	2	20	1	18	5	18	86
use Class VI. Machinery and Tools for Manufacturing	126	11	2	2	12	1	. *		1	
	166	7	8	2	12	1			1	
Class VII. Civil Engineering, Architectural and Building										
Contrivances Class VIII. Naval Architec-	6'		2		8				1	
ture, Military Engineering.										
• Armor and Accoutrements, Class IX. Agricultural, Hor-	71	17	17	3	7	2		4		
ticultural, and Dairy Im-				-						
plements Class X. Philosophical In-	94	9	7	1	4	. •	8	9	2	
struments, and Products	170					07				
resulting from their use Class XI. Manufactures of	179	41	88		30	37	8	7	5	
Cotton Class XII. Manufactures of	29	11	5		1			8		
Wool	21	18	57	2	13					
Class XIII. Manufactures of Silk and Velvet	9	13	20		13	5	1	8	11	
Class XIV. Manufactures of			•						1	
Class XV. Mixed Fabrics, as	10	20	14		11	1	7	2		
Shawls, Vestings, &c Class XVI. Leather, Furs.	7	11	22		6			11		
Hair, and their Manufac-										
tures Class XVII. Paper, Station-	58	18	25	4	25	4	3	7	5	6
ery, Types, Printing, and										
Book-binding. Class XVIII. Dyed and Print-	61	27	35	1	18		5	8	4	1
ed Fabrics	13	2	1		18	2	2	2	1	
ing Carpets, Floor-cloths,	ł.									
Lace, Embroideries, Trim- mings, and Fancy Needle-									ł	
work Class XX. Wearing Apparel. Class XXI. Cutlery and Edge	70			2		10	2			
Class XXI. Cutlery and Edge	92	48	81		5	1	8	11	. 2	2
Tools Class XXII. Iron, Brass,	44	19	4		28	2		85		
Pewter, and General Hard-										
ware Class XXIII. Works in Preci-	149	40	65		26	1	7		2	2
ous Metals, and their Imi-										
tation Class XXIV. Glass Manufac-	51	18	12		18	7	2	3	7	
tures Class XXV. Porcelain, and	24	16	8	1	10		4	10		
other Ceramic Manufac-	·		ŀ		1			1		
tures Class XXVI. Decorative Fur-	1	85	9		16	1		7	1	
niture and Upholstery	99	18	27		4	8	8	2	12	2
Class XXVII. Manufactures in Marble, Slate, and other					1					
Ornamental Stones Class XXVIII. Manufactures	- 85	10	1		7		3	7	6	2
from Animal and Vegetable Substances not Woven or		] .	!		l		1		ł.	
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Class XXIX, Miscellaneous		^		1	1 "	"	1	ן ו	1	1
Manufactures, and small Wares, such as Perfumery,										
Toys, &c Class XXX. Musical Instru-	185	83	74		29	11	9	16	4	8
ments	54	5	28	1	8	4	1	5		
Class XXXI. Fine Arts	~	<u> </u>	<u> </u>	<u> </u>	1	I	I	<u> </u>	<u> </u>	<u> </u>

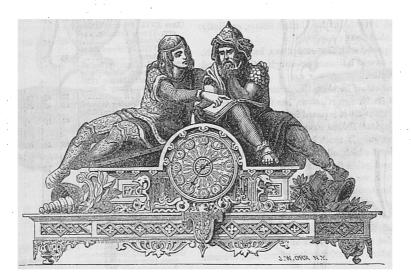
The contributions of Sweden and Norway, Denmark, Mexico, Turkey, and Hayti are few in number, and not of sufficient



Messrs. T. & R. Boote, Burslem, Staffordshire, exhibit a graceful pitcher, decorated with wreaths of flowers, &c., in white parian, of great excellence and beauty.



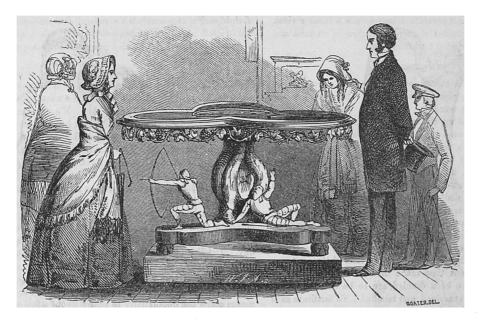
THE FIRST WHISPER OF LOVE.



THE ELABORATE CLOCK

The elaborate clock in bronze is a contribution of Lerolle, Freres, of Paris, and represents the conversion of a Saracen. The French department presents a great many objects in

bronze—a branch of manufacture in which the French have excelled all others, both in beauty of design and excellence of workmanship.



THE SHAMROCK TABLE.

The Shamrock Table is composed of some *thirty* kinds of Iri-h oak. The whole is an ingenious piece of carving and inlaid work. The flat surface of the table is in form like a three-leafed shamrock, whence the name. The pedestal is ornamented by three figures, cut out of solid oak. Two of them are heroes: the other is an aged harper. The table is designed to illustrate the feudal times of Ireland, and is an object of interest as a fine work of art, as well as on account of its associations. It is contributed by John Fletcher, of Cork.



FRENCH ORNAMENTAL CHAIR.



LOUIS FOURTEENTH CHAIR.

France has long maintained a superiority in decorative furniture. The two engravings above represent two elegant parlor chairs from Balny, jr., of Paris. One of them is enameled in white, with gold decorations, and upholstered with white and red damask, in the style of Louis XIV. The other is of French black walnut, and is rich in nice art.

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importance to warrant separate columns in this tabular view. Denmark has contributed the group of figures, "Christ and his Apostles," the original by Thorswalden.

### THE EXHIBITION.

The Exhibition was thrown open to the public on the 15th of July, but in a very imperfect condition. Since then, it has steadily advanced towards its completion. The courts have been gradually filled up, the machine arcade finished, and the picture gallery adorned with numerous works of art. The Exhibition, at length, was completed; and on Friday evening, August the 20th, the building was opened to the public to inspect the paintings, illuminated with more gas-burners than light the streets of New-York. Such a blaze of brilliancy, broken and varied by an endless interlacery of reflected luminous streams and arches, is seldom permitted to the gaze of mortals.

The contributions to the EXHIBITION, and their arrangement, may now be regarded as complete. But how shall we contemplate them? How shall we recall them in after life, and preserve to our latest days a comprehensive view of the contributions, and the nations that made them? The thirty classes into which they have been divided, are to be our guide. In classes, let them be examined and recalled. To facilitate such an examination, and such a recollection, we have prepared a tabular view of the whole EXHIBITION, in which the nations represented in it, and the number of their contributions, may be seen at once. Such a table is a key to the Exhibition, and enables us readily to form an idea of the nature and extent of THE AMERICAN INDUSTRY OF ALL NATIONS. (See opposite page.)

# VISITING THE EXHIBITION.

A visit to the Exhibition is no common event in the life of the multitude. The dwellers at the far West and distant South look forward to it as a point from which they shall date a wider existence. Distance, as is commonly the case, lends enchantment to the view, and this enchantment is kept up, and even magnified, by the daily press, and intercourse with visitors.

And all this, in the majority of cases, is nothing more than the fever of sight seeing on a large scale. There is neither art nor system in it, and for want of these, many will wander from court to court, lost in an unprofitable stare, or an affectation of importance. The multiplicity and variety of objects confuse the mind.

A lady, for instance, sitting in her quiet rural cottage, comes to the conclusion to pay a visit to the INDUSTRY OF ALL NATIONS. She has curiosity enough to see "the Palace." With this impulse alone, and regardless of any preparation, she resolves to go early, and spend a *whole day* amidst the fruits of the world's industry. Artless one! And when she returns at the close of the long day, it will be to say, It was wonderful, but no tongue can tell the wonders.

A city lady, somewhat corpulent, after an unusually fine dinner. goes forth with her grandson to see the Exhibition. She too must see what is to be seen. And she does see it. After waddling for two or three hours from aisle to aisle, she leaves the Crystal Palace, and somewhat heavily takes her seat in the Sixth avenue rail-road-car. "Dear me, Edmund," speaking to her precocious grandson, "it is a great thing, but I don't think I will go again."

Another sight-seer stands before the gigantic statue of Washington, and scrutinizes every part. He thinks only of the finish, and the likeness to a horse and the "FATHER OF OUR COUNTEX." The size, the design, and the effect of distance and perspective do not enter at all into his notions. "How roughly," he exclaims, "they have finished his boots! The poorest blacksmith in the land would not forge a set of horse-shoes like them. He would use the hammer and the rasp."

These instances are adduced here to show the purposeless character of visits to the Exhibition, and the want of preparation in many who make these visits. It is the joy or novelty of sight-seeing that controls the visitor. But sight-seeing alone and in itself is a kind of brain-fever, and unless guided and moderated by some well-defined purpose, becomes oppressive to both body and mind.

And what should this purpose be ? Not one of pleasure or fashion. It should be an *educational* one. All should be learn ers in the Crystal Palace; all should be students amidst such an assemblage of the products of Art. We care nothing for cynical critics; men who can judge of a boot, or piece of lace, or a machine, but who see no power and beauty in a Terra-cotta Vase, or Powers' Eve. All should be students, and keep their sectional wisdom to themselves. The wisest mechanic and the truest artist have so much to learn in the Exhibition that they become untrue to themselves and their calling, if they waste time and opportunity in inflicting upon themselves or the public crude criticisms, when they should be improved in enlarging their acquaintance with art.

As students, we should visit the Crystal Palace from day to day. The Exhibition affords us opportunities to learn the present condition of the arts and progress of the race, such as we have never enjoyed before. It is the Normal School of Art for the nation. As a people, we need its lessons, and should by no means allow the opportunity to pass without a full measure of improvement. We need its lessons. We need the influence of the Exhibition throughout our country. The awakening and instructive comparisons so happily afforded there, are admirably adapted to chasten national exclusiveness, moderate boasting, and supply the conditions for the free and generous culture of taste. But if these benefits are to be enjoyed by our people, their visits to the Exhibition must be systematic. Let them be, in the main, topical visits. The thirty one classes into which the Industry of all Nations is divided, will form the outline which the visitor should fill up from day to day.

#### RAW MATERIALS.

THE systematic visiting of the Exhibition naturally begins with the contributions of Nature, or those articles in the production of which, she has had the chief agency. They are the materials of art, and form a pleasing introduction to the agency of man. There they are, the aided or unaided products of nature.

The department of RAW MATERIALS is one of no ordinary interest to the reflecting mind. It opens up to view the natural inheritance of the nation, and shows us the circumstances in which they have prosecuted the Arts of Peace.

This department, for convenience and profitable contemplation, is divided into four classes.

1. Minerals, Mining, Metallurgy, and Geological and Mining Plans and Sections. This class is well represented by the United States and Canada. There is little beauty in the objects found here, but vast utility. Here we find the nuterials for our manufactures, implements, machines, and fuel. The ores and stones which make up the hidden treasures of the earth, and which a kind Providence has laid up in secret places, may be contemplated even by the religionist with profit.

2. Chemical and Pharmaceutical Products and Processes. This class is well represented, and furnishes numerous objects of interest to almost every one. The artist and manufacturer will find in the Zollverein fine specimens of ultramarine. Saxony exhibits fine specimens of almost every known substance used in medicine, or known by the chemists. We need not be particular here. The visitor may spend some hours at least in the English, American, French and German divisions, examining the objects of this class, and receive new impressions of the importance of Chemistry.

3. Substances used as food. The objects in this class belong either to the animal or vegetable kingdoms, and although familiar, and for the most part well known, present much that is truly attractive. Here are specimens of cereal grains, flour, chocolate, sugar, spices, rice, coffee, banana fruit, cassava meal, gelatine, meat-biscuits, and tobacco also, as it destroys the sense of hunger; these and other objects in this class show the skill of man in ministering to the appetite of hunger.

4. Vegetable and Animal substances, used in the arts of manufactures. This class is extensive, and embraces all those objects on which the manufacturer exerts his skill, in changing hem into new and useful purposes. We have fine specimens of American woods, hemp, flax, and cotton. England, through the East India Company, furnishes samples of the productions of the East, and through Cooper & Bolton, specimens of all the seeds cultivated in Great Britain. France contributes raw silk; Switzerland sends wasp fur; and British Guiana, woods, seeds, and cotton.

Such is an outline of the department of RAW MATERIALS. It deserves a careful examination. Let it be studied with the aid of geography and history, and the visitor will close the study with his mind greatly enlarged by a knowledge of the climate, soil, natural productions, and civilization of the nations represented in the Exhibition.

#### MACHINES.

Nature produces few things that are adapted to the wants of man in their crude state. If we withdraw the air, the fountain spring, some fruits, and the shelter of caves and forests, what remains that directly meets the conditions of life? Nor is this want of direct fitness in the products of nature to meet the wants of man, the only difficulty to be encountered. Her raw materials are surrounded with barriers that must be broken down before they can be said to be in our possession, or under our control. Illustrations of this statement are found in every department of life. They may be gathered up in mining, the pigments of artists, and the apparel that we wear. The genius of Eli Whitney, the inventor and improver of the cotton gin, was needed to place upland cotton under the control of the So thern planter. Nature produced it, but it was given to him to construct a machine that would separate its short, entangled staple from the seed, and with a facility that would warrant its culture.

Machines, when thus viewed, become objects of vital interest They are the peaceful armor of man, and lie at the basis of prosperity in every department of enterprise. Furnishing itself with them, knowledge, in the true sense of the truism, is power. They multiply a myriad fold the power of man, and enable him to contend successfully with the obstacles of nature, and subdue all her forces. By them, he breaks up the stubborn glebe, opens a pathway to riches in the ribbed rock, extends his plaus over oceans, and introduces the weapon of fabled Jupiter to toil in his workshop, or moderates its power, so that it does the work of an engraver, or of healing medicine.

With these considerations, we turn to the MECHANICAL DE-PARTMENT. Machines await our examination. A vast variety of contrivances for the saving of human labor and the increase of human power, is laid out before us, and presents materials for the most profitable study. This department is of more than ordinary importance to the American people. Necessity imposed upon us a rapid advance in the scale of nations, and also the payment of a higher price for labor. What was to be done ! How did we meet the claims of necessity ? By obedience to necessity. We belought ourselves of the resources of man, and the force of circumstances turned our young energies into the path of mechanical invention. Machines were multiplied. Machines fitted to the exigencies of our condition were produced, and the people went forward to meet all the claims of necessity. The result is, that machines for direct and indirect use, are more numerous in the United States than in any other nation on the earth. The Exhibition confirms this statement.

The Mechanical Department, which is now before us, and

whose useful objects await our examination, is vast. We can do little more than indicate its importance. It is divided into *six* classes.

1. Machines for direct use. This class includes Steam, Hydraulic and Pneumatic engines; railway and other carrages.

2. Machinery and tools for manufacturing purposes. There are no less than ten machines for sewing cloth or leather, exhibited by American inventors.

3. Civil Engineering, Architectural and Building contrivances. This class has, within the last few years, greatly extended its sphere of influence.

4. Naval Architecture, Military Engineering, Ordnance Armor and Accoutrements. We find much in this class that indicates the daring and progressive spirit of our people.

5. Agricultural, Horticultural, and Dairy Implements and Machines. The contrivances for the saving of human labor which are found in this class, claim more than a passing notice The national territory is eminently fitted for agricultural pur suits, and every invention that facilitates the calling of the tar mer, and multiplies his resources, claims our thoughtful attention. Our agricultural interests are second to no other in importance.

6. Philosophical Instruments, and products' resulting from their use, such as Maps, Charts and Daguerreotypes: Horology. and Surgical instruments and appliances, belong to this class. It is almost unnecessary to say that it will have more than ordinary attractions for the student and man of science. There is power in philosophy. The contributions of science to the arts have been no less than the wisdom and devices of the artist and artisan.

These views, we are aware, form nothing more than an introduction to the Mechanical Department. Such they were designed to be, and such only. Space allows us to add a thought or two on the importance of machines and their intimate connection with other branches of industry. We will do it by an instance or two. But where shall we make the selection t Whitney's cotton gin is at hand, and is admirably adapted to our purpose.

The cotton gin is a machine invented by Eli Whitney, to separate the short staple of upland cotton from the seed. The staple of this variety of cotton is so entangled with the seed as to make its separation by hand or simple machines so expensive as not to warrant its cultivation. The invention of the cotton gin, in 1793, placed a power in the hand of the planter that readily accomplished this separation. This gave an impulse at once to the cotton trade, and through it to commerce and manufactures. Facts confirm these statements. *Five* bugs only were imported in 1785, eight years before its invention. In 1793, *three hundred and seven* bags were imported; and in 1794, the year in which it came into extensive use, the crop was 17,777 bales, 3,000 of which were exported.

We select another instance,-the Power Press. By the use of these machines the slow and clumsy processes of Faust and Guttenberg have been greatly exceeded, and books of high quality are manufactured with every facility of mechanical de tail. The RECORD OF THE INDUSTRY OF ALL NATIONS is printed on two power presses in the building of the Exhibition, moved by steam power. As a result worthy of observation, a double number of the Record, in the highest style of typography, is furnished for twenty-five cents, a price that puts it within the reach of every family in the land. And shall any American family be without it ? We cannot forego the opportunity presented in this connection of acknowledging our indebtedness to Mr. PUTNAM and his Record for much that is valuable in this article, and of expressing our disapprobation of the principles on which the Exhibition is managed, as wanting in a generous nature.



THE WINGED BOY.

The Winged Boy, called the Genius of Spring, is the work of Pelliceia, Director of the Fine Arts Academy at Carrare. It has many points of interest connected with its execution; but we think the conception does not realize the fancies that float through our minds when we think of the time of buds and blossoms—the season of vegetable resurrection.



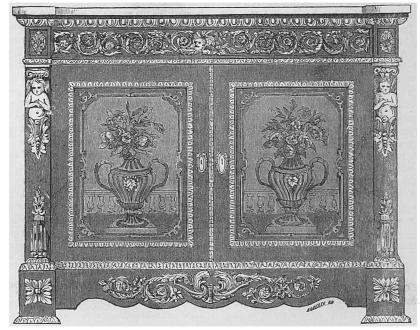
STATUETTES, OHIEFLY OF ITALIAN FIGURES.

Ameres 5.00 & Co., of Milan, have contributed some fine articles in terra cotta; among these, we have been particularly pleased with the above statuettes—so national in design and so truthful in execution.



SHAKSPEREAN CUP.

The Shakspere Cup is exhibited by Mr. Thomas Sharp, of London. It is executed in gold. It is a noble specimen of art. The cover is surmounted by a figure of the immortal poet. The sides are embellished with scenes from his plays.



CABINET OF EBONY, WITH INLAID PANELS. CONTRIBUTED BY RIQUET LE PRINCE & CO., OF NEW-YORK

The MACHINE ARCADE, in our estimation, is one of the most interesting divisions of the Crystal Palace, and to it we direct our steps. Here, we are to find the secondary causes of American progress and civilization,—the power that has wrought our greatness. Withdraw the mechanic and his contrivances from our domestic history and that of our mother-country, England, and what remains of our present dimensions?

The visitor, as he enters the Arcade or recalls it in imagination in after-life, should look upon the forms and combination of forms which the metals, and especially iron, have assumed, as expressed ideas. Mind, intimately acquainted with the laws of nature, is embodied in every machine. Viewed in this way, the Arcade is a study, in which, we are called upon to contemplate and understand the mind of man as it arms itself with the conquered forces of nature and goes forth to new conquests.

As we stated in the outset of this article, we are only to be looked upon as indicators of what is to be observed by the visitor, and how he is to observe it. Notices and criticisms are necessarily excluded, only so far as their introduction may be deemed proper to give significancy to our indications.

We are still in the Machine Arcade. Look upon its various objects. Planing Machines, Lathes, and Steam Engines—these are the giant implements of labor. These and others, multiply to an extraordinary extent, the resources of human power, and constitute one of the most instructive stand-points, from which to look back on human progress and form a just estimate of modern civilization. I do not allude, in this observation, so much to the augmentation of power as such, as the devices by which its points of contact with all its legitimate objects are so greatly multiplied. The mind and hand are now armed to grapple successfully with all the known forces of nature.

Before we leave the Arcade, we are forced to ask a question of some interest. Where are the machines that we have seen in private establishments; machines that honor American ingenuity? We speak advisedly when we say that our mechanical genius is not fully represented in the Crystal Palace. As an instance that confirms this statement, we refer to the Geometrical Lathe, invented independently by the late Mr. Spencer, of Philadelphia, and Mr. Cyrus Durand, of New-York, and now used so extensively in bank-note engraving. In the hands of the latter gentleman, it has been greatly improved, and by the introduction of the Cycloidal Motion, a new element of beauty has been added to its former products.

MANUFACTURES, in the order of nature, next claim the attention of the visitor. Here are the fruits of human struggles: the fruits of Science and Art. Man, armed with Machinery, has gone forth and acted upon the raw materials of the world. What has he accomplished? How has he changed the raw material on which he has acted, and what new objects has he furnished that meet human wants and minister to the comforts and taste of man? A life of study alone could furnish a complete answer to this question.

Cotton Manufactures are well represented by the United States and England. This department of industry is growing rapidly into importance among ourselves. The enterprise enlisted in it and represented in the Exhibition, is of the most respectable character. And yet, as a nation, we fail in the qualities of excellence and durability. A comparison of the products of the two branches of the Anglo-Saxon race in this department will justify this remark, and that comparison we solicit. Nations and individuals find out their measure and true station by free contact with each other.

Wool and Woollen Manufactures are now to be observed. This department has a higher interest than the one that has just occupied our attention. The products are numerous, and of a character that commands admiration. The United States is well represented here, and exhibits great enterprise and promise. Skill is manifest, but it is not sufficiently sustained by past experience and scientific investigation. We are too dependent and imitative. We lean even deceptively upon England and France, and thus paralyze our skill and perpetuate a false taste for foreign manufactures.

But we pass to an outline of the subject before us. The exhibition in this department does not come up to the ordinary expectation. France and England are not well represented. These nations, relying on their conscious superiority in the manufacture of woollen fabrics, have been somewhat careless in their exhibition. Russia is well represented by one house. Belgium takes the lead of all others in the American Exhibition, presenting us with woollen goods that combine in an eminent degree those qualities that should be found in such fabrics.

Having touched upon the qualities of woollen fabrics, we pause in our survey to point them out to the visitor.

The first point of importance which claims our notice is the *quality* of the wool itself, and its proper assortment. Here we are confessedly behind other nations, and perhaps, from the nature of our climate, must be content to be inferior in the production of the raw material.

The proper *cleansing* of the wool, removing from it all its native oils, and every thing else that is offensive to the smell, is a process of great importance, and one to which England has given a commendable degree of attention.

The softness and flexibility of woollen goods are prime qualities. A harsh and stiff article, whatever may be its other qualities, never can be admitted into the first class.

The *durability* of the color is another desirable quality, and especially so in our climate. The fastness of the dye is severely tested, and unless it abides the test, the fabric must be rejected.

The durableness of the *finish* is another quality to which we direct attention. France and Belgium succeed in furnishing woollen fabrics remarkable for the beauty of their finish, but the west of England stands alone in its durability—a quality that depends mainly upon a firm and elastic texture.

*Elasticity* is a first-rate quality in woollen fabrics, and forms an important element in the comfort and wear of apparel made from them. Upon it, in a great degree, depends the neatness of garments, especially of coats and pantaloons. The art of the tailor will not long present taste in the article of dress where it is wanting.

We might proceed in this way to speak of other qualities, such as *body*, *glossiness of texture*, and *lightness*, the latter being a very desirable one in our climate, and one in which French manufacturers have long excelled. Our own nation is not far behind, some of its manufactures producing woollen fabrics that compare in this and other qualities very favorably with France, England, and Belgium.

Messrs. Derby & Co, of England, exhibit a case that has much interest for the visitor in connection with this department—a case of wool in the various processes of manufacture: 1, scoured white; 2, indigoed; 3, dyed black; 4, carded in plaits; 5, spun into yarn; 6, harnessed for the treddle; 7, woven, but showing the thread; 8, felted, or filled; 9, dressed, or teazled; and, 10, finished black cloth.

Leaving the manufacture of woollen goods, we might proceed to examine those of flax and hemp; mixed fabrics and tapestry. Under the latter head, we find the far-famed Gobelin carpets, products of skill and patience that exist only under the patronage of French royalty—a kind of crochet-work that reproduces the works of some of the great masters in painting, with a correctness and truthfulness of effect that almost rivals that of paint. For us, they are only objects of wonder, and when examined in the light of true art and humanity, appear only as the products of extravagant power.

The transition to cutlery and edge tools and general hardware is somewhat abrupt. But it must be made. The show in these departments of industry is imposing, and here the United States may be said to rival and, in some cases, excel the old nations of the earth.

The works in precious metals attract us. Gold and silver have yielded themselves to the skill of man, and appear in various forms. The silver ware exhibited by English manufacturers is very fine, and justly commands admiration. Messrs. Ball, Black & Co., of New-York, exhibit a tea-set made of Californian gold, manufactured with much taste.

The manufacture of glass, and especially of ornamental glass, has for us something more than a passing interest. It is closely connected with taste, and may, in some of the forms which it is now assuming, be as closely connected with domestic comfort. Stained glass is within the reach of families of moderate circumstances, and if used in the glazing of our windows, would moderate the glare of our unclouded suns, and throw over the domestic circle a pleasing and mellowed light. Messrs. Cooper & Belcher, of Camptown, N. J., exhibit stained and ornamental glass that commands much attention. Its manufacture is a happy union of the slow but delicate processes of the hand with the rapid and equally delicate movements of the machine. A kind of Geometrical Lathe, invented by Cyrus Durand, produces a great variety of combinations of curve and wave lines, circles and ovals, that yield a very agreeable effect. The general introduction of ornamental glass windows is a desideratum in our climate, and would add very much to the architectural effect of our buildings.

The manufacture of porcelain and ceramic wares has grown, within a few years, into a form of ornamental art. It is well represented in the Exhibition. England and France have furnished us with studies that must go far to introduce elegance into our table-service and the furniture of our green-houses. This department of the Exhibition has unusual attractions for heads of families. It holds out to them the means of the earliest tasteful education, introducing beauty in the poppy-leaved candlestick that lights our children to bed, and placing before them in the pitchers that grace the dinner-table, the wreathed form of the lily.

By an easy and pleasing transition, we pass through decorative art, upholstery, and musical instruments, to the fine arts the products of the chisel and the brush. In doing so, we cannot avoid turning the attention of the visitor to the easy gradations by which the mechanical and useful arts lose themselves in jorms of beauty. Utility and taste are now united in almost every branch of human industry.

Sculpture is well represented by Italy, Austria, France, England, and the United States. In wandering among the numerous and diversified objects of this department, we find conceptions that make us wiser and better. Silent monumental books are open, inviting us to read lessons that instruct us in the existence, mystery, and destiny of the soul.

One thing is very prominent: the connection of the Bible, religion, and art. No skepticism can divorce them. The soul of the artist, true to its native instincts and destiny, turns to the mysterious and divine as revcaled in the Bible, and in religion, finds the finest scope for its creative power.

Eve is a striking illustration of this remark. Austria, France, and the United States have formed their conceptions of the mother of mankind. There they are, and their study reveals some remarkable features in the genius of those nations. The Eve of Austria is a conception of guilty fear, bordering on terror and agony. The artist seems to have chosen the moment when the voice of God was heard walking in the garden; and as His voice echoed in the shady arbors of Eden, presents Eve on a rock, alone, startled as if from insensible slumber, inclining forward from her seat, with her hand raised behind her ear to catch the sound, and her brow contracted in mental pain. It is a fine work of art, but untrue to the Scriptures and experience.

The Eve of France is a conception of moral regret, softened by some slight kindlings of relenting sorrow. She stands by the almost crushed and despairing Adam, subdued, but not convicted, dressed in a veil of cool sentimentalism. The conception, we cannot say, is one that commands our admiration. It is not true to woman's nature; nor does it embody even the shadow of her dread agency in the fall.

The Eve of the United States, the work of Hiram Powers,

Esq., is, in our estimation, far superior in conception and execution to the others, and realizes, as they do not, the transaction of the fall and the true mission of art.

The artist seems to have selected that moment after her act of disobedience, when the first glow of conscious guilt educed reflection. She pauses and upholds her step. One hand, raised either in shame or apprehension, partly hides her swelling breast; the fingers of the other, unconsciously relaxed, almost relinquish their hold on the forbidden fruit. The head is slightly inclined in chastened, guilty sorrow, and on the countenance, a far-reaching intellectual conception of her state, calls up and mingles the feelings that wait on conscious disobedience, such as shame, regret, sorrow, despondency, and apprehension. The whole conception is remarkable for its truthful and intellectual character: the execution is delicate and beautiful in a high degree. The Eve of Powers, if we except his own Greek Slave, comes nearer the requirements of art than any other work in the Exhibition.

The Picture Gallery now awaits our passing notice. It forms an important department in the American Exhibition, and may be visited again and again as a school of taste, such as the Americans are seldom permitted to attend. As a nation, we have comparatively few artists, and almost no galleries. In this state of things, the oil paintings form a desirable feature in the American Exhibition.

The artists of Dusseldorf have furnished some seventy easel pictures. France has presented the same number. Ten artists of Switzerland are represented. The different modern schools of Europe exhibits works that are creditable witnesses of their rival claims and merits. Our own country is also represented. We noticed, on our entrance, the fine painting of Leutze,— Washington crossing the Delaware. As we examined it in its new relations, we felt that it had lost nothing by becoming neighbor to the works of European artists. The conception of Washington is grand, and is another proof of a singular feature in art that has often been alluded to, that America alone understands Washington and is capable of representing him. As conceived and embodied by Leutze, he is the hero of the gallery. There is no form or expression there that will compare with his republican dignity.

We leave the picture gallery, the crowded aisles, and, musing on all we have seen and felt, mingle again with the busy outdoor world.

Our thoughts soon revert to the Exhibition. There, in peaceful contention, appear the great nations of the earth. "The power-press" is greater than the park of artillery; the plough takes precedence of the sword, and the fine woollen cloths of Holland have a higher claim upon us than the garments rolled in blood. Such exhibitions tend to exalt service, and throw discredit on the pursuit of war.

But what, we ask, is the effect of the Exhibition upon our own people? What has it conferred upon the nation? The effects of the American Crystal Palace, we believe, are numerous and beneficial. The existence of such a building and such an exhibition in our midst, and heralded so well and so far by the daily and weekly press, has been felt in the extreme arteries of our country. Pulsations of wonder, and purposes of new enterprise, have made the heart of the people beat quickly. And yet, we doubt if any national effect has been wrought, beyond that which will grow out of individual and local impressions. From the beginning of the Exhibition to the present moment, there have been no indications of national pride or enthusiasm. The people come and go with the feelings that carry them to the Museum.

It ought to be otherwise. The American Crystal Palace, even as an associated enterprise, deserves more attention, and is adapted to produce better impressions. But so it is. We bow to necessity, consoling ourselves with the thought that good has been produced some where. The wise and pure are still with us, and to them it has been a school of science and art, in which nations are the instructors.

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The Sabrina is in Parian, and is exhibited by Mr. Copeland, and may be regarded as the finest of all his productions. Sabrina is the poetical creation of Milton, in his Mask of Comus—an immortal production. She is represented by the poet as listening to the invocation of the brothers.

> "Sabrina fair, Listen where thou art sitting Under the glassy, cool, translucent wave, In twisted braids of lilies knitting The loose train of thy amber-dropping hair."

The Sabrina in the Exhibition is modelled after Marshall, and happily expresses the original conception of the poet.



THE DANCING-GIRL REPOSING.

The engraving above is an outline of the Dancing-Girl Reposing, by W. C. Mashall, A. R. A. The figure is well modelled, and the attitude and drapery are expressive of repose. The eye seems to rest thoughtfully on some pleasing object, and gives an harmonious balance to the body.



WILD BOAR ATTACKED BY DOGS, IN BRONZE. EXHIBITED BY AUGUSTE WEYGANT, OF PARIS.

