Jan Jan (Wide)

CLINICAL REPORT

OF THE

LYING-IN SERVICE AT BELLEVUE HOSPITAL,

FOR THE YEAR 1873.

ВХ

WILLIAM T. LUSK, M. D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF CHILDREN IN BELLEVUE HOSPITAL MEDICAL COLLEGE,

Box 10,

[REPRINTED FROM THE NEW YORK MEDICAL JOURNAL, AUG., 1874.]

NEW YORK:

1). APPLETON AND COMPANY,

549 & 551 BROADWAY.

1874.

THE POPULAR SCIENCE MONTHLY.

(Established May, 1872.)

Conducted by Prof. E. L. YOUMANS.

THE POPULAR SCIENCE MONTHLY was started to promote the diffusion of valuable scientific knowledge, in a readable and attractive form, among all classes of the community, and has thus far met a want supplied by no other periodical in the United States.

The great feature of the inagazine is, that its contents are not what science was ten or more years since, but what it is to-day, fresh from the study, the laboratory, and the experiment: clothed in the language of the authors, inventors, and scientists themselves, which comprise the leading minds of England, France, Germany, and the United States. Among popular articles, covering the whole range of NATURAL SCIENCE, we have the latest thoughts and words of Herbert Spencer, and Professors Huxley, Tyndall, and R. A. Proctor. Since the start, it has proved a gratifying success to every friend of scientific progress and universal education; and those who believed that science could not be made any thing but dry study, are disappointed.

The press all over the land is warmly commending it. We subjoin a few encomiums

from those recently given:

"That there is a place for THE POPULAR SCIENCE MONTHLY, no one can doubt who has watched the steady increase of interest in scientific investigation manifested in this country, not only by a select class, but by the entire community."—New York Times.

"A journal which promises to be of eminent value to the cause of popular education in this country."—New York Tribune.

It is, beyond comparison, the best attempt at journalism of the kind ever made in this country." -Home Journal.

"The initial number is admirably constituted," -Evening Mail.

"We think it is not too much to say that this is the best first number of any magazine ever published in America."—New York World.

"It is just what is wanted by the eurious and progressive mind of this country, and ought to be widely circulated."—New York Evening Post.

"It is the first successful attempt in this country to popularize science in the pages of a month-ly."—N. Y. School Journal.

"Not the less entertaining because it is instructive."—Philadelphia Age.

"The Monthly has more than fulfilled all the promises which the publishers made in the prospectus of publication."—Niagara Falls Gazette.

"It places before American readers, what the ablest men of science throughout the world write about their meditations, speculations, and discoveries,"—*Providence Journal*.

"This is a highly-auspicicus beginning of a nseful and much-needed enterprise in the way of publication, for which the public owe a special debt of obligation to Messrs, D. Appleton & Co."—Boston

obligation to Messrs, D. Appleton & Co."—Roston Guzette.

"This new enterprise appeals to all who are interested in the laudable effort of diffusing that information which is best calculated to expand the mind and improve the conditions and enhance the worth of life."—Golden Age.

"Just the publication needed at the present day." Montreal Gazette.

"This new magazine, in our estimation, has more merit thau the whole brood which have preceded it."—Goswego Press.
In our opinion, the right idea has been happily hit in the plan of this new monthly."—Buffalo Courier.

nit in the plan of this new monthly."—Buffale Courier.

"This is one of the very best periodicals of its kind published in the world. Its corps of contributors comprise many of the ablest minds known to science and literature. It is doing a great and noble work in popularizing science, promoting the growth of reason, and leveling the battlements of old superstitions reared in the childhood of our race before it was capable of reasoning."—The American Medical Journal, St. Louis, Mo.

"This magazine is worth its weight in gold, for its service in education, St. Louis, Mo.

"Journal of Education, St. Louis, Mo.

"This monthly enables us to utilize at least sev-

"This monthly enables us to utilize at least several years more of life than it would be possible were we obliged to wait its publication in book-form at the hands of some compiler."—The Writing Teacher and Business Advertiser, New York.

THE POPULAR SCIENCE MONTHLY is published in a large octave, handsomely printed on clear type, and, when the subjects admit, fully illustrated. Each number contains 128 pages.

TERMS: \$5 per Annum, or Fifty Cents per Number.

Any person remitting \$20.00 for four yearly subscriptions, will receive an extra copy gratis, or five yearly subscriptions for \$20.00.

Now Ready, Vols. I., II., III. and IV. of The Popular Science Monthly, embracing the Numbers from 1 to 24 (May, 1872, to April, 1874). 4 vols., 8vo. Clota, \$3.50 per vol. Half Moroceo, \$6.50 per vol.

For Sale, Binding Cases for Vols. I., III., III., IV., of The Popular Science Monthly. These covers are prepared expressly for binding the volumes of The Popular Science Monthly as they appear, and will be sent to Subscribers on receipt of price. Any binder can attach the covers at a trilling expense. Price, 50 cents each.

D. APPLETON & CO., Publishers,

ADDRESS

CLINICAL REPORT

OF THE

LYING-IN SERVICE AT BELLEVUE HOSPITAL,

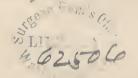
FOR THE YEAR 1873.

BY

WILLIAM T. LUSK, M. D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF CHILDREN IN BELLEVUE HOSPITAL MEDICAL COLLEGE.

[REPRINTED FROM THE NEW YORK MEDICAL JOURNAL, AUG., 1874.]



62506

NEW YORK:
D. APPLETON AND COMPANY,
549 & 551 BROADWAY.
1874.



CLINICAL REPORT OF THE LYING-IN SERVICE AT BELLEVUE HOSPITAL, FOR THE YEAR 1873.

As a large amount of misconception, both on the part of the profession and the public, prevails concerning the lyingin wards of Bellevue Hospital, it has been thought good by the writer to present an accurate tabular history of the service for the year ending January 1, 1874.

The year in question has been chosen, not because of the peculiarly favorable exhibit it presents, but because, during the entire period, a complete record was kept of every woman confined in the hospital, from the time of delivery to that of her death or discharge.

These records show a total of 449 patients, twenty-one of which were confined outside, and afterward brought to the hospital. The annual mortality was twenty-five, or in the proportion of one to eighteen. The number of confinements, of primiparous labors, and deaths for each month, is given in Table I.

TABLE I.

MONTHS.	Confinements each Month.	No. of Primiparæ each Month.	No. of Deaths each Month.
anuary	33	14	2
renruary	30	13	4
March	38	26	â
April	28	9	ĭ
lay	41	17	î
une	41	18	-
uly	30	17	• •
ugust	42	24	· i
antamber	45	15	9
eptember			9
ctober	83	14	ð
ovember	42	16	3
December	46	26	4
Total	449	209	25

In comparison with the above, the records from 1865 to 1872 inclusive report the deaths for each year at 17, 30, 9,

24 (no report for 1869), 31, 33, and 16. Thus it will be seen that the year 1873 was not an exceptionally good one. The increased mortality in 1870 and 1871 is attributable to the closure of Charity Hospital to this class of cases in 1870, on account of its having been visited by a severe epidemic of puerperal fever. This closure largely increased the number of patients seeking admission to Bellevue Hospital, and at the same time the actual, though not the relative mortality. As is usually the case, however, the mortality was greater in 1871, the year following the overcrowding, than in 1870.

The year 1872 witnessed but sixteen deaths. Of these, two cases died of convulsions, one of paralysis, two of phthisis, one of puerperal hæmorrhage, one of Bright's disease, and one of peritonitis developed outside the hospital, leaving thus a total of eight cases referable to peritonitis or some form of puerperal fever, for which the hospital may be held responsible.

An analysis of the twenty-five deaths occurring in 1873 shows that two women died from puerperal convulsions, two from rupture of the uterus (one of the patients was brought into hospital in a dving condition), two from phthisis, one from pneumonia, one from cerebral embolism (patient brought into hospital twenty-two days after confinement, from street). and two cases of peritonitis consecutive to labor, and developed before admission. In estimating the influence of the hospital in developing disease, these ten cases may be left out as having no bearing upon the question. There remain, then, fifteen cases illustrating puerperal inflammations, or some form of blood-poisoning, i. e., about one to thirty. Of the fifteen, twelve were primiparæ, of whom six were delivered by forceps, after labors of long duration. In three instances the operations were performed by internes, or members of the house-staff, and in two of these the application of the forceps was made within the cervix, before dilatation was completed, i. e., under circumstances requiring the utmost skill and prudence.

Death in one instance: was due mainly to excessive mental depression on the part of the patient, who had been driven from her home in Michigan, and who felt herself an outcast without hope, and without a future.

တ
35
-
جم
8
THE YE.
1
E-31
E
5-1
C
Z
F
5
ā
-
AUSES, DURING
H
100
Al
0
I
3
3
2
2
AL, FROM PUERPERA
Ď
1
냋
0
2
1
В
V
Ξ
9
OSP
HOSP
HOSP
JE HOSP
TUE HOSP
EVUE HOSP
LEVUE HOSP
LLEVUE HOSP
ELLEVUE HOSP
BELLEVUE HOSP
N BELLEVUE HOSP
IN BELLEVUE HOSP
S IN BELLEVUE HOSP
HE IN BELLEVUE HOSP
THS IN BELLEVUE HOSP
ATHS IN BELLEVUE HOSP
EATHS IN BELLEVUE HOSP
DEATHS IN BELLEVUE HOSP
F DEATHS IN BELLEVUE HOSP
OF DEATHS IN BELLEVUE HOSP
OF DEATHS IN BELLEVUE HOSP
ER OF DEATHS IN BELLEVUE HOSP
BER OF DEATHS IN BELLEVUE HOSP
IBER OF DEATHS IN BELLEVUE HOSP
TMBER OF DEATHS IN BELLEVUE HOSP
NUMBER OF DEATHS IN BELLEVUE HOSP
NUMBER OF DEATHS IN BELLEVUE HOSP
L NUMBER OF DEATHS IN BELLEVUE HOSP
AL NUMBEI
ABLE IITOTAL NUMBER OF DEATHS IN BELLEVUE HOSP

Remarks.	Annie S—. Suffered greatly from depression of spirits during pregnancy. Had been driven from her home in Michigan. Despondency increased after labor.	Ellen H.—. Mania on third day; died on the eleveuth day; scarlatinous eruption. Frances S.—. Forceps; fever second day; died Feb. 11th. Jane L.—. Erysipelas of breast on fourth day; died March 5th.	Adelaide B.—. Labor began February 28, ended March 2d; died March 10th. Bella A.—. Delivered outsides is not to hospital with peritonitis; died in a medical	Internation and second card attributes of the foreign of the forei	finement, two after confinement. Died April 2d. Mary T.—. Delivered in station-house and sent to hospital. Died in medical ward	currect days ance admission. Hamaah P.—. Hamorrhage from varicose veins; mania on third day; sent to cells; pneumonia from window of cells being broken by delirious patient confined in the	Betsey K.—. Twin pregnancy. Mary G.—. Forceps applied within cervix. Hannah H.—. Sudden spondaneous rupture of uterns during labor. Collapse. Annis S.—. Wituessed the sudden death of case No. 13.	Mary — Brought into hospital twenty-two days after confinement. Had rheumatism, vegetation on mitral valve, and hemiplegia.	Blom McC——. Uremic peritointis. Laura B.—. Brought in motivate. Died shortly after delivery. Mary C.—. Brought in from a private lying in asylum in a state of collapse, after six	agys or tubor. Kulplure of nierrs. Futra child extracted. Kate G.—. Died soven days after confinement. Kate McC.—. Died seven days after confinement. Armite G.—. Died January 2, 1874. Armite G.—. Independent demonstration and suriety Chill on fifth day. Died on	by. Died five days after confinement. Special moranination showed entire vagina to be covered with hes. Died twelve days after confinement.
Cause of Death.	Peritonitis.	Uterine phicbitis. Peritonitis. Erysipelas and infarction of lung	Peritonitis.	Peritonitis. Uræmia.	Peritonitis.	Pneumonia.	Peritonitis. Peritonitis. Rupt. of Utcrus. Peritonitis.	Cerebral embo-	Convulsions. Phthisis. Rupt. of Uterus.	Exbaustion. Puerperal fever. Uterine phlebitis.	Phthisis. Septicamia.
Character of Labor.	Normal.	Normal. Forceps. Normal.	Normal.	Forceps.		Normal.	Normal. Forceps. Artificial. Normal.		Artificial.	Forceps. Normal. Forceps.	Forceps.
Duration of Labor. First Second Stage. Stage. Jours. Hours.	જ	0000000	450	± 000	:	60	17.00	7 B C	080	0 TO	1248
Durati Lab First Stage. Hours.	14	1480 38 600	£4:	: ss	:	20	11.30 20 64.6 17.30 64.6 64.6 64.6 64.6 64.6 64.6 64.6 64.	:	1438 6 days	54 49 <u>18</u> 10	1445
Number of Pregnancy.	-		- :	- CS		-	« н он-		4470	4070	₹ 65 🗖
Social Condi-	1	ळळळ	≱:	တ်ဘဲ	' :	υ'n	nini Kinin		KKS	S. H. H.	i His
Age.	17.1	21. 18 21. 23 21. 29	. 21	88	:	. 26	188888 188888	10	2488	8888	88
.Date.	1 Jan. 1.	2 Jan. 11. 8 Feb. 2. 4 Feb. 21.	6 Feb. 28.	7 Mar. 6. 8 Mar. 8.	9 Mar	10 April 6.	11 May 11. 35 12 Aug. 26. 30 13 Sep. 21. 32 14 Sep. 21. 23	Oct	17 Oct. 18. 18 Oct. 26. 19 Nov. 2.	20 Nov. — 1 21 Nov. 10. 8 22 Dec. 2. 8	24 Dec. 25, 25 25 Dec. 13, 36
Number.	7	S & 4	್ದಾ ಅ	1-00	C	10	H 3844	16	138	82288	3 24 28

Of the three pluriparæ, one suffered intense remorse at having become the mother of a second illegitimate child; another died after giving birth to twins; the third gave birth to her ninth child after a labor lasting forty-nine hours.

Numbers 21 and 22 (see Table II.) were the only women in the fifteen designated who claimed to be married. Now, the entire number of married women confined during the year was 240. Thus, the number of deaths from puerperal disease, among the class who furnish the statistics of civil practice, furnished in the hospital a mortality of less than one per cent.

In striking contrast with the above are the thirteen deaths among the unmarried, of whom there were 209 all told. Thus, among women whose children were born out of wedlock, the death-rate rose to five and a half per cent. The exact reason for this difference is not very apparent. That it was not entirely due to mental depression is probable from the fact that during three summer months—from the last of May to the last of August—there were no deaths, though during that period fifty-seven unmarried women were confined. The excess of primiparous labors among the unmarried likewise fails to explain the difficulty, as, among the married women, sixty-three were confined during the year for the first time, with the loss of but one life.

It may, however, be as well noticed here that while many of the patients who come to Bellevue Hospital are callous and indifferent, there are always certain among them who feel their position most keenly. Now, any depressing agency is a dangerous element in a lying-in-hospital. If, indeed, some means could be devised to provide a future for the better disposed among the unfortunates, and persons could be found to take a little humane interest in their welfare, a great addition would be made to the medical resources of the hospital. Few people realize the appalling mental condition of some of these poor outcasts. Without money, or friends, or sympathy—with the question of death, or a horrible career as an alternative, before them, it is difficult to keep under control the suicidal propensities of the more desperate. The writer has constantly his attention drawn to cases of perito-

nitis resulting from patients getting out of bed one or two days after confinement, and walking barefooted over cold, uncarpeted floors, when the nurse, for any reason, happened to be out of the room. In some of these cases the only impelling motive to the imprudence has been a knowledge that it is forbidden.

The table on the next page shows the total number of cases of puerperal disease from which the patients recovered.

Here, too, the preponderance of disease among the unmarried is very apparent (fourteen out of twenty-two). The cases of convulsions, the case of nephritis, and the two cases of puerperal mania, were accidental occurrences attributable mainly to the antecedents, and physical conditions of the patients who seek admittance to a great hospital.

While the hospital receives so large an amount of wretchedness, absolute immunity from puerperal disorders is unattainable. Even disastrous epidemics are liable to occur under most careful management. The occurrence of such epidemics does not demand the destruction of the hospitals in which they break out, but their temporary closure.

In Charity Hospital the present condition of the lying-in service is said to be excellent, yet in 1871 it had to be closed on account of puerperal fever. In 1872 there were twenty deaths out of 205 patients at the Nursery and Child's Hospital. The hospital was closed for the time, and the next year there were but four deaths from all causes among the women confined there. Over and over again operations have been suspended at the Woman's Hospital, on account of a temporarily unhealthy condition of the atmosphere.

But what are the means by which all this evil may be abated? It is folly to assume that no reform can be accomplished. Certainly it is unworthy a great city like this not to have a special hospital, separate from a general hospital, for the reception of lying-in patients. Such a hospital ought not to be an old rookery, purchased to meet an emergency, but should embody the practical results of the studies of the most eminent hygienists of the day. The selection of the site of such a hospital should be subordinated entirely to the interests of the patients. But when this has been done it will

TABLE III.—TOTAL NUMBER OF PUERPERAL AFFECTIONS OCCURRING IN BELLEVUE HOSPITAL, DURING THE YEAR 1873, FROM

WHICH THE PATIENTS RECOVERED.

Paragraph		Remarks.	Mary H.—. Lizzle A.—. Delivered outside. Mary D.— Child weighed cleven pounds. Kate C.—. Bolla G.—. Mary H.—. Mary H.—. Mary H.—. Mary H.—. Mary H.—. Agnes M.—. Delivered outside. Amic M.—. Delivered outside. Pauline S.—. Became delirious on the 10th of July, and taken home by friends on the 18th, improved. Rate E.—. Got out of bed, contrary to orders, soon after her confluement. Mary P.—. Rate M.—. Ellen C.—. Rate M.—.	Mary Mc—. C. M—.
Paration of Layor. President of Layor. Paration of Layor. Parati		Diseases.	Cellulitis. Puerporal fever. Cellulitis. Cellulitis. Cellulitis. Petro peritonitis. Petro peritonitis. Convulsions. Petro peritonitis. Petro abscess. Petro peritonitis. Petro abscess. Petro peritonitis.	Peritonitis. Convulsions.
Дап. 1. Дар. 1. Дар. 1. Дар. 1. Дар. 2. <	Character of Labor,		Forceps.	
Da. Age. Duration. Condition. Con	on of	Second Stage. Hours.	HO CO	00000
Jan. 1. Jan. 2. Jan. 2. Jan. 2. Jan. 2. Jan. 2. Jan. 2. Jan. 3. Jan. 3	Durat		888 4081480841 841 10 11 113 14081480 841 10 11 113 1408141819 841 10 11 113 140818191919 10000000 0000 0000 0000	200 200 200 200 200 200 200 200 200 200
Jan. 1. 22 Jan. 1. 32 Jan. 2. 32 Jan. 3. 32 Jan. 32 Jan. 3. 32 Jan. 32 Jan. 3. 32 Jan. 3	вивисл.	Mumber of Pre		- 00
Jan. 1. Jan. 1. Jan. 1. Jan. 1. Jan. 16. March 1. March 13. April 1. April 13. April 26. May 26. May 28. Nov. 27. Dec. 24.	•۵	Social Condition		
		Age.	88 848848484 488 84 48	1 % 24 %
HadmuM Hawarococciss 425 Fo costs				

be found that success lies chiefly in the internal economy practised. An abundance of light and air, plenty of free space, generous diet, plenty of washing, a rigorous discipline maintained in the management, intelligent nursing, and constant watchfulness on the part of the attending physicians, are among the most important means of preventing and suppressing epidemics. Per contra, with limited room, ignorant nurses, and lax discipline, fatal results will prevail in spite of pavilions, or the most expensive machinery for ventilation.



MEDICAL WORKS PUBLISHED BY D. APPLETON & CO.

Anstie on Neuralgia. 1 vol., 12mo. Cloth, \$2.50. Burker on Puerperal Diseases, 1 vol. Cloth, \$5.00.

Barker on Sea-Sickness. 1 vol., 16mo. Cloth, 75 cents. Barnes's Obstetric Operations. 1 vol., 8vo. Cloth, \$4.50. Bellevue and Charity Hospital Reports. 1 vol., 8vo. Cloth, \$1.00. Bennet's Winter and Spring on the Mediterranean. 1 vol., 12mo. Cloth, \$3.50. Bennet on the Treatment of Pulmonary Consumption. 1 vol., 8vo. Cloth \$1.50. Billroth's General Surgical Pathology and Therapentics. 1 vol., 8vo. Cloth. \$5.00, Sheep, \$6.00. Bastian's Diseases of Nerves and Spinal Cord. (In press.) Bulkley's (L. D.) Acne; its Pathology, etc. Combe on the Management of Infancy. 1 vol., 12mo. Cloth, \$1.50. Carpenter's Mental Physiology. \$3.00. Chanveau's Comparative Anatomy of the Domesticated Animals. Edited by George Fleming, F. R. G. S., M. A. I. 1 vol., Svo, with 450 Illustrations. Cloth, \$6.00. Davis's (Henry G.) Conservative Surgery. Cloth, \$3.00. Diekson on Medicine in Relation to the Mind. Cloth, \$3.50. Elliot's Obstetric Clinie. 1 vol., 8vo. Cloth, \$4.50. Ecker's Convolutions of the Brain. Price, \$1.25. Flint's Physiology. 4 vols (Vol. V. in press.) 8vo. Cloth, per vol., \$4.50; Sheep, \$6. Flint's Manual on Urine. 1 vol., 12mo. Cloth, \$1.00. Flint's Relations of Urea to Exercise. 1 vol., 8vo. Cloth, \$2.00. Frey's Histology and Histo-Chemistry of Man. (In press.) Hammond's Diseases of the Nervons System. 1 vol., 8vo. Cloth, \$5.00. Hammond's Physics and Physiology of Spiritnalism. 1 vol., 12mo. Cloth, \$1. Holland's (Sir Henry) Recollections of Past Life. 1 vol., 12mo. Cloth, \$2.00. Howe on Emergencies. 1 vol., 8vo. Cloth, \$3.00. Huxley on the Anatomy of Vertebrated Animals. 1 vol. Cloth, \$2.50. Huxley and Youmans's Physiology and Hygiene. 1 vol., 12mo. Cloth, \$1.75. Hammond's Insanity in its Relations to Crime. 1 vol., 8vo. Cloth, \$1.00. Hammond's Clinical Lectures on Discases of the Nervons System. Hamilton's (A. McL.) Electro-Therapeutics. 1 vol., 8vo, cloth, \$2.00. Johnston's Chemistry of Common Life. 2 vols., 12mo. Cloth, \$3.00. Letterman's Recollections of the Army of the Potomac. 1 vol., 8vo. Cloth, \$1. Lewes's Physiology of Common Life. 2 vols., 12mo. Cloth. \$3.00. Manual of Medicinal Chemicals and their Preparations. Cloth, \$3.00. Markoe on Diseases of the Bones. 1 vol., 8vo. Cloth, \$4.50. Mandsley on the Mind. 1 vol., 8vo. Cloth, \$3.50. Maudsley's Body and Mind. 1 vol., 12mo. Cloth, \$1.00. Mandsley on Responsibility in Mental Disease. Meyer's Electricity. 1 vol., 8vo. Cloth, \$4.50. Niemeyer's Practical Medicine. 2 vols., 8vo. Cloth, \$9.00; Sheep, \$11.00. Neftel on Galvano-Therapeuties. 1 vol., 12mo. Cloth, \$1.50. Nightingale's Notes on Nursing. 1 vol., 12mo. Cloth, 75 cents. Nenmann on Skin Diseases. 1 vol., 8vo. Cloth, \$4.00. Peaslee on Ovarian Tumors. 1 vol., 8vo. Cloth, \$5.00. Pereira's Materia Medica and Therapentics. 1 vol., 8vo. Cloth, \$7; Sheep, \$8. Sayre's Club-foot. 1 vol., 12mo. Cloth, \$1.00. Schroeder on Obstetries. 1 vol., 8vo. Cloth, \$3.50. Steiner's Compendium of Children's Diseases. (In press.) Strond's Physical Cause of the Death of Christ. 1 vol., 12mo. \$2.00. Swett on Discases of the Chest. 1 vol., 8vo. Cloth, \$3.50.
Simpson's (Sir Jas. Y.) Complete Works. Vol. I. Obstetries and Gynæcology. 8vo.
Vol. II. Anæsthesia, Hospitalism, etc. 8vo. Vol. III. The Diseases of Women. Per vol.,
Cloth, \$3.00; Sheep, \$4.00. Tilt's Uterine Therapentics. 1 vol., 8vo. Cloth, \$3.50. Van Buren on Diseases of the Rectum. 1 vol., 12mo. \$1.50. Van Buren and Keyes's Genito-Urinary Diseases, with Syphilis. Cloth, \$5; sheep, \$6. Vogel's Diseases of Children. 1 vol., 8vo. Cloth, \$4.50; Sheep, \$5.50. Wells on Diseases of the Ovaries. 1 vol., 8vo. Cloth, \$5.00. Wagner's Chemical Technology. 1 vol., 8vo. \$5.00.

D. APPLETON & CO., Publishers, 549 & 551 Broadway, New York.

International Scientific Series.

WOK READY.

- No. 1. FORMS OF WATER, in Clouds, Rain, Rivers, Iee, and Glaciers. By Prof. John Tyn-DALL, LL. D., F. R. S. 1 vol. Cloth. Price, \$1.50.
- II.5. 2. PHYSICS AND POLITICS; or, Thoughts on the Application of the Principles of "Natural Selection" and "Inheritance" to Political Society. By Walter Bagenot, Esq., author of "The English Constitution." 1 vol. Cloth. Price, \$1.50.
- No. 3. FOODS. By EDWARD SMITH, M. D., LL. B., F. R. S. 1 vol. Cloth. Price, \$1.75.
- No. 4 MIND AND BODY. The Theories of their Relation. By ALEX. BAIN, LL. D., Professor of Logie in the University of Aberdeen. 1 vol., 12mo. Cloth. Price, \$1.50.
- No. 5. THE STUDY OF SOCIOLOGY. By Herbert Spencer. 1 vol., 12mo. Cloth, \$1.50.
- No. 6. THE LOCOMOTION OF ANIMALS, as exemplified in Walking, Swimming, and Flying. By G. Bell Pettigrew, M. D. 1 vol., 12mo. Cloth. Price, \$1.75.
- No. 7. THE NEW CHEMISTRY. By Prof. Josian P. Cooke, Jr., of Harvard University. 1 vol., 12mo. Cloth. Price, \$2.00.
- No. 8. THE CONSERVATION OF ENERGY. By Prof. Balfour Stewart, LL. D., F. R. S. 1 vol., 12mo. Cloth. Price, \$1.50.
- No. 9. RESPONSIBILITY IN MENTAL DISEASE. By Dr. HENRY MAUDSLEY.
- No. 10. THE SCIENCE OF LAW. By Prof. SHELDON AMOS. (In press)
- No. 11. THE ANIMAL MACHINE. By Prof. E. J. MARRY, of the College of France; member of the Academy of Medicine. (In press.)

PROSPECTUS.

D. Appleton & Co. have the pleasure of announcing that they have made arrangements for publishing, and have recently commenced the issue of, a Series of Popular Monographs, or small works, under the above title, which will embody the results of recent inquiry in the most interesting departments of

advancing science.

The character and scope of this series will be best indicated by a reference to the names and subjects included in the subjoined list, from which it will be seen that the cooperation of the most distinguished probess s in England, Germany, France, and the United States, has been secured, and negotiations are pending for contributions from other eminent scientific writers.

The works will be issued simultaneously in New York, London, Paris, and Leipsic.

The INTERNATIONAL SCIENTIFIC SERIES is entirely an American project, and was originated and organized by Dr. E. L. Youmans, who spent the greater part of a year in Europe, arranging with authors and authorisms.

The forthcoming volumes are as follows:

Prof. T. H. HUXLEY, LL D., F. R. S., Bodily Motion and Corresionsness. Sir John Lubbook, Bart., F. R. S., The Antiquity

of M.in.

of M.m.

Prof. Ruddley Virchow (of the University of Berlin, Marbirl Physiological Action.

Dr. H. Charleon Bastlan, M. D., F. R. S., The Britinas an Organ of Mind.

Prof. W. Thistleton Dyer, B. A., B. Se., Form and Hibit of Flowering Plants.

Prof. W. Kingdon Clifford. M. A., The First Principles of the Exact Sciences explained to the Non-Mathematical.

Mr. J. N. Lockyer, F. R. S., Spectrum Analysis.

W. Lauder Lindsay, M. D., F. R. S. E., Mind in the Lover Animals.

W. Lauber Lindsky and the Lover Animals.

Prof. James D. Dana, M. A., LL. D., On Coplanization; or, Head Domination in it: Relation to Structure, Grade, and Develop-

ment.
Prof. S. W. Johnson, M. A., On the Nutrition of Plunts.

f. Austin Flint, Jr., M. D., The Nerrous Sys-tem, and its Relation to the Bodily Functions.
Prof. W. D. Whitney, Modern Linguistic Sci-

ence. Prof. A. C. Ramsay, LL. D., F. R. S., Earth Sculpture.

Prof. LAUAZE-DUTHIERS, Zoology since Cuvier.

Dr. HENRY MAUDSLEY, Responsibility in Dis-

ease. Prof. Michael Foster, M. D., Protoplasm and

the Cell Theory.
M. J. Berkeley, M. A., F. L. S., Fungi; their Nature, Instunces, and Uses.

Prof. Claude Bernand (of the College of France).

Thysical and Actuphysical Phenomena of

Prof. A. Quetelet (of the Brussels Academy of Sciences), Social Physics. Prof. A. Da Quatherfages, The Negro Races. Prof. C. A. Young, Ph. D. (of Dartmonth College).

The Sun.

Prof. Beenstein (University of Halle), The Physi-ology of the Senses. Prof. Herman (University of Zurich), On Respira-

Prof. Leuckard (University of Leipsic), Outlines of Chemical Organization. Prof. Rees (University of Erlangen), On Parasitic

Plants.

. Vo:FL (Polytechnic Academy, Berlin), The Chemical Effects of Light. . Wundt (University of Strasbourg), On

Prof. Schmidt (University of Strasbourg), The Theory of Descent—Darweinism. Prof. Rosential (University of Erlangen), Physiology of Muscles and Nerves.

Professors II. Saint-Claire Deville. Berthelot, and Wurtz have engaged to write, but have not yet announced their subjects. Other eminent authors, as Wallace, Helmholtz, Parks, Milne-Edwards, and Haeskel, have given strong encouragement that they will also take part in the enterprise.

D. APPLETON & CO., Publishers, 549 & 551 Broadway, N. Y.