that some of the cards do not present registrable matter.

Under section 5 of the bill above mentioned, the registration of this class of objects is provided for as follows:

"Section 5. That every pack of playing cards printed and manufactured in the United States shall be entered under the copyright law in the office of the Librarian of Congress, under the same conditions and provisions of law as those relating to books; one of the cards in each pack of playing cards so copyrighted to bear the notice prescribed by section 4962 of the Revised Statutes as amended."

There is every reason why this measure should become a law, for it will clear the air in regard to this class of registration, and will afford protection, not only for new designs for the faces of ordinary playing cards, but will cover such classes of cards as are designed to be used for the purpose of educating children in the use of words, or in history, geography, the languages or familiar quotations.

PTOMAINE POISONING.

Within the last few days a number of persons in New York City have died from ptomaine poisoning, so that public attention is now directed toward the mysterious nature of these poisons, which are not generally well understood. "Ptomaine" is a generic name for alkaloid bodies formed from animal and vegetable tissues during putrefaction and the similar bodies produced by pathogenic bacteria; it comes from Greek words meaning a "corpse that has fallen." Very often, perhaps generally, the degeneration in the food product is not far enough advanced to offend either the taste or the senseof smell;consequently, suspicion is not excited, and a person eats or drinks something which contains enough of the poison to make a great deal of trouble, if the result is not fatal. We often hear, in the summer, for instance, that persons who attended a picnic were stricken with a violent illness, and that the physicians in the neighborhood were kept busy for hours. The fact is developed that only those who ate ice cream were made sick. Sometimes it is reported that some one had poisoned the food maliciously, but it is known that the cause of most, if not all, of these distressing experiences was the presence of ptomaines in the milk out of which the ice cream was made.

It is not an easy task to trace the history of milk back far enough to reveal the precise conditions under which the ptomaines were developed, but it is believed that failure to properly cool the milk immediately after it was taken from the cows is a partial explanation of the evil. Warm weather favors this condition. The ptomaines of ice cream (tyrotoxicon) are particularly to be dreaded, as well as the other poisons, such as mytilotoxin, found in mussels.

It is not pleasant to contemplate that the air we breathe, and the water we drink, and a large proportion of our food abounds in bacteria of different kinds. Most of them are, fortunately, harmless, or should be if proper precautions are taken. Milk is far from being the only medium for the transference of this poison to human beings. A great variety of solid foods of animal origin are also likely to develop ptomaines. One frequently hears of poisoning by canned goods, such as potted meats or canned salmon, for instance. In some cases a metallic agent, perhaps the solder, is the cause of the trouble, but in the majority of cases the sickness, especially if it is of an intestinal and painful character, is due to ptomaines. To all appearances, the food may be entirely fit for consumption, and perhaps none of those employed in the canning house may be responsible, but the chances are that unperceived putrefaction has set in and that ptomaines have been produced.

Fresh fish and oysters are not exempt from the tendency to develop ptomaines. Indeed, fish was one of the first sources from which these poisons were obtained by chemists. The earliest feat of this kind was performed with gelatine in 1882. Since this time Brieger and others have found a variety of ptomaines, such as cadaverine, putrescin, peptotoxin, muscarin and mydaleine.

Several cases which have occurred in New York City have resulted from eating shad roe, and though it is probable that the tragic death of the great musical conductor Anton Seidl was not caused by this poison, as was at first thought, still this delectable delicacy has been tabooed by many people, owing to the fear which they have of being poisoned by it. The symptoms of ptomaine are vomiting, nausea, diarrhoea and retarded respiration, and in advanced stages coma.

There is no known antidote for this poison, though of course emetics and purgatives should be used where the poison is suspected. There are numerous ptomaines in the body, but they are absorbed by the oxygen or expelled by the bowels, liver and lungs. If not, they strike the nerve centers and sickness results. The real cause of many mysterious deaths is ptomaine poisoning, but there are, of course, many cases of it which do not result seriously.

THE NAVIES OF THE WORLD.

The World Almanac for 1898 contains some most usable tables, showing the comparative strength of the various navies of the world, and we are indebted to this publication for the annexed tables. They were prepared by Lieut. W. R. Hamilton, Fifth Artillery, United States Army, and have been corrected from the latest official reports on file at the War Department, December, 1897.

NAVIES OF EUROPE AND THE UNITED STATES.

CLASS OF VESSELS.	Great Britain.	France.	Germany.	Italy.	Austria-Hungary	Russia.	Spain.	Denmark.	Netherlands.	Turkey.	Portugal	Sweden and Norway.	United States.*
Battleships, 1st Class	29	15	5	8	....	14	1	.....	.....	1	....	.....	9
Guns of Same... {H. G.	114	57	36	38	....	124	17	.....	.....	10	....	.....	136
Guns of Same... {S. B.	1,257	615	164	315	....	332	18	.....	.....	10	....	.....	297
Battleships, 2d&3d Cl'ss	24	9	10	2	10	4	2	.....	3	8	1	.....	2
Guns of Same... {H. G.	264	76	93	27	80	41	29	.....	20	75	3	.....	18
Guns of Same... {S. B.	575	216	169	112	204	79	22	.....	37	105	6	.....	27
Sea-Going Coast Def'nce	6	13	5	7	3	7	....	26	7	6	2	8	6
Guns of Same... {H. G.	94	29	24	32	12	20	....	78	32	40	6	28	30
Guns of Same... {S. B.	83	203	116	58	66	84	.....	21	91	63	45	120	54
Non-Sea-Going C't D'ce	11	12	11	.....	4	21	2	.....	17	3	.....	18	14
Guns of Same... {H. G.	38	18	11	....	4	83	3	.....	18	6	.....	26	24
Guns of Same... {S. B.	91	86	22	.....	12	166	6	.....	100	8	.....	45	6
Armored Cruisers	18	13	7	8	2	14	8	.....	.....	.....	.....	.....	2
Guns of Same... {H. G.	184	78	14	30	10	137	14	.....	.....	.....	.....	.....	38
Guns of Same... {S. B.	679	259	256	313	100	287	194	.....	.....	.....	.....	.....	36
Protected and Partially Protected Cruisers	123	47	13	29	8	3	13	5	10	6	4	2	16
Guns of Same... {H. G.	535	46	54	59	13	26	98	34	86	44	.....	2	169
Guns of Same... {S. B.	2,373	1,085	331	496	40	53	161	48	160	32	48	20	232
Unprotected Cruisers	3	14	6	....	2	20	4	1	2	2	3	4	5
Guns of Same... {H. G.	38	160	48	.....	21	59	20	8	10	29	22	24	18
Guns of Same... {S. B.	34	199	45	.....	2	234	25	6	4	16	6	24	16
Gunboats, 1st Class	49	16	2	.....	.....	12	11	9	36	....	.....	21	19
Guns of Same... {H. G.	79	18	2	.....	.....	16	11	9	34	.....	.....	31	107
Guns of Same... {S. B.	38	49	.....	.....	.....	53	6	46	84	.....	.....	49	123
Gunboats, 2d & 3d Class	20	33	1	3	8	2	13	.....	15	12	2	.....	.....
Torpedo-Boat Dest'yers	103	17	18	18	11	39	17	.....	6	6	3	6	3
Torpedo Boats, 1st Class	51	46	104	117	36	88	11	6	20	12	12	.....	18
" " 2d Class	33	149	54	4	5	6	28	5	12	20	9	37	1
" " 3d Class	107	54	16	70	35	97	9	13	31	4	27	20	2
Hulks and Stationary Vessels	139	86	12	3	9	2	6	6	16	3	....	7	29
Subsidized Vessels	28	12	10	16	....	36	14	.....	.....	54	....	.....	4
Obsolete Vessels	32	30	5	7	5	3	59	2	23	12	23	37	11
Despatch, Training, Transports, Repair, Tugs, and Miscellaneous Vessels	219	105	47	55	21	98	25	61	24	36	44	38	68
Officers	2,243	2,220	967	795	617	1,260	1,009	146	540	392	367	176	1982
Seamen	68,916	49,300	17,820	20,406	11,900	36,000	16,300	1,109	8,320	20,600	4,096	6,780	†12,600
Marines—Officers	746	1,640	236	88	76	382	400	40	43	84	18	123	.....
" Soldiers	17,843	27,800	2,500	440	730	2,890	6,930	264	1,700	1,200	606	1,300	.....
Total Active List	79,947	80,920	21,513	21,734	13,513	40,532	24,629	1,559	10,603	22,276	5,089	8,279	13,582
Naval Reserves	33,000	34,350	37,000	19,600	2,000	45,000	25,000	4,000	10,000	36,000	4,000	12,500	2,800

* This column is inserted for purposes of comparison. † Includes marine corps.
H. G. Heavy guns or primary batter. S. B. Secondary batteries or light guns.

In the table given above, the enumeration of vessels of the United States Navy includes those built and building.

NAVIES OF MEXICO, SOUTH AMERICA AND ASIA.

CLASS OF VESSEL.		Japan.	China.	Siam.	Korea.	Argentine Republic.	Brazil.	Chile.	Ecuador.	Peru.	Uruguay.	Paraguay.	Mexico.
Battleships, 1st class	H. G.	5 { 20	..	..	..	..	..	..	..	..	..	..	..
	S. B.	5 { 186	..	..	..	..	..	..	..	..	..	..	..
Battleships, 2d and 3d classes	H. G.	2 { 12	..	..	..	1 { 8	2 { 18	2 { 11	..	..	..	..	..
	S. B.	2 { 17	..	..	..	1 { 14	2 { 27	2 { 44	..	..	..	..	..
Coast defence vessels	H. G.	6 { 6	..	..	..	4 { 12	10 { 21	1 { 2	..	..	..	..	..
	S. B.	6 { 28	..	..	..	4 { 32	10 { 61	1 { 9	..	..	..	..	..
Armored cruisers		4	..	..	..	1	..	2	..	..	..	..	..
Unarmored cruisers		22	17	1	..	4	9	3	..	1	..	..	..
Gunboats, 1st class		3	16	..	..	5	14	2	..	..	..	..	..
Gunboats, 2d and 3d classes		6	..	1	2	2	13	8	..	..	..	..	..
Torpedo boats, 1st class		5	4	..	..	18	15	1	..	..	..	..	5
Torpedo boats, 2d class		63	6	..	..	14	7	..	..	..	..	..	..
Torpedo boats, 3d class		79	36	..	..	..	11	12	..	..	..	..	..
Subsidized vessels		3	..	..	..	..	14	15	..	..	..	..	..
Hulks and stationary vessels		3	..	1	..	1	..	3	1	1	1	..	..
Obsolete vessels		7	6	6	..	1	..	2	1	1	3	1	6
All other vessels		9	28	10	..	17	31	15	1	9	7	2	6

H. G. Heavy guns. S. B. Secondary battery.

JUBILEE ANNIVERSARY OF THE AMERICAN SCIENCE ASSOCIATION.

BY HORACE C. HOVEY.

Fifty years ago the American Association for the Advancement of Science was organized for the purpose of promoting intercourse between scientific men throughout the continent, encouraging systematic scientific research and increasing the facilities for more thorough investigation and enlarging the usefulness of scientific labors. These ends have been sought by periodical and migratory meetings, by publications, by wide correspondence, and perhaps, most happily of all means, by encouraging genial and familiar intercourse between scientists.

The completion of the first half century of this noble work will be celebrated in an appropriate manner in the city of Boston, August 22–27, 1898, and the preliminary announcements for the jubilee are already made. The meeting will be held in response to the invitation of the Governor of Massachusetts, the Mayor of Boston, and the numerous scientific and educational institutions that cluster about that center of intellectual life and activity This cordial invitation was accepted at the Detroit meeting of the Association. The Boston Local Committee, now organized, includes a most distinguished list of names, among which we note those of his Excellency Governor Wolcott, as the Honorary President; twenty-five presidents of universities, colleges and other institutions, together with others of distinction, as Honorary Vice-Presidents; one hundred and twenty-nine Members at Large; Dr. Thomas Dwight, Prof. Alpheus Hyatt and Prof. E. C. Pickering, as Honorary Secretaries, and Col. H. L. Higginson as Honorary Treasurer. The latter gentleman is also the Chairman of a strong Committee on Finance. The Chairman of the Reception Committee is Dr. J. R. Chadwick, that of the Committee on Invitations is Dr. Henry P. Bowditch, that of the Committee on Excursions is Gen. F. H. Appleton and that of the Executive Committee is Prof. W. T. Sedgewick. The Local Secretary, to whom all correspondence should be addressed, is Prof. H. W Tyler, of the Massachusetts Institute of Technology, Boston, Mass.

The Boston scientific Jubilee promises to be one of the most important and interesting assemblies of the kind ever convened. Many foreign scientists of eminence will take part in the exercises and make addresses. Foreign educational and scientific bodies will send delegates, thus giving the occasion an international character. A number of "affiliated societies," really the offspring of the A. A. A. S., will meet during the Association Week, including those for the study of Geology, Chemistry, Botany, Forestry, Entomology, Mathematics, Engineering, etc. All general and sectional meetings will be held in the halls and rooms of the Institute of Technology and of the Boston Society of Natural History. One day will be spent as the guests of Harvard University, one day in the historic city of Salem, and excursions are planned for the White Mountains, Cape Cod, and other regions of interest.

Members who have allowed their membership to lapse are requested to renew their connection with the Association. A thousand new members are called for, and every scientific man in America is appealed to in order to make this Fiftieth Anniversary of a great Association a marked event in the intellectual history of our continent. Anniversary cards will be sent, previous to the meeting, to all entitled to them, and a list of members in good standing will be printed for the opening day. Each of the nine Sections will prepare a programme in advance, and notice of papers offered should be sent at an early date to the proper secretary. A special invitation is given to all surviving Founders of the Association, that is, of those who shared in the meeting of 1848. The names and addresses of such should be sent at once to Prof. F. W. Putnam, Harvard University, Cambridge, Mass., so that they may enjoy the recognition to which they are entitled.

FLOORS FOR MAGAZINES.—Cement floors in powder magazines are dangerous, because cracks and cavities may form in them, constituting receptacles for inflammable matter, besides which cement nearly always contains silicious particles which may cause ignition by shock or merely by rubbing. Such floors have been forbidden in France since 1881 and in Belgium since 1894, the mine regulations requiring that powder magazines be floored with asphalt or planks. A circular from the Belgian minister of industry calls the attention of mine inspectors to the necessity, when authorizing a powder magazine, of requiring that the regulations be strictly observed in this respect, and also that timber floors be made of oak planks well jointed, perfectly smooth and free from cracks.