

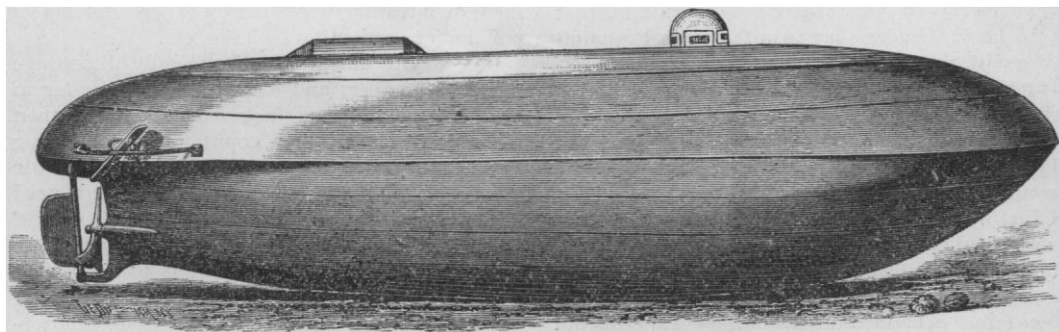
ally lists of subjects upon which papers are desired by the section, as was done to some extent in the recent circulars of the section. In this way, live subjects are apt to be most beneficially canvassed, and experiment and discovery kept in the right paths. It may be well, in this connection, to mention some inventions which are now, so to speak, 'in the air'; of course, we all recognize that the flying-machine belongs to this class, in one sense if not in another, and a paper upon it has been presented which may prove of interest to you. What is needed, however, is a sufficiently light motor, without which a flying-machine cannot be expected to succeed. Steam power, also, for agricultural work in its many forms, is not yet an accomplished fact; and we may mention one machine greatly needed, — a cotton-picker. Then, too, there is the electric motor for street traffic, which needs further improvement; also the transmission of power over great distances, electric lighting, etc., etc.

But I have said enough to indicate how large a field may, in my judgment, be covered by this section of mechanical science and engineering, and how its meetings may in the future be made still more useful and interesting than they have been in the past.

she travelled several miles, answering her helm as readily as a steam yacht. The boat is an iron spindle thirty feet long by eight in diameter, with a propeller, and vertical and horizontal rudders. The motive power is a fourteen horse-power Westinghouse engine, furnished with steam from a caustic-potash reservoir, which is charged from an outside source. Deadlights in the conning-dome forward, together with a compass, enable the pilot to shape his course. Ingress and egress are effected through an aperture in the hatchway near the stern, which may be hermetically sealed from the inside.

#### NOTES AND NEWS.

THE officers for the next meeting of the American association are as follows: President, S. P. Langley. Vice-presidents: mathematics and astronomy, Wm. Ferrel; physics, Wm. A. Anthony; chemistry, Albert B. Prescott; mechanical science and engineering, Eckley B. Cox; geology and geography, G. K. Gilbert; biology, W. G. Farlow; anthropology, D. G. Brinton; economic science and statistics, Henry E. Alvord. Permanent secretary, F. W. Putnam; general secretary, W. H. Pettee; assistant general secretary, J. C. Arthur.



TUCK'S SUBMARINE TORPEDO BOAT.

#### A NEW SUBMARINE TORPEDO BOAT.

THE accompanying illustration represents a new submarine boat, invented by Mr. J. H. L. Tuck, and now being tested in this city, with highly satisfactory results. On Tuesday, August 24, the first public exhibition of the vessel was given in the Hudson River, opposite 86th street, in the presence of a number of scientific men. Manned by a crew of two men, pilot and engineer, she started off at a good rate of speed, disappeared, travelled perhaps half a mile without making a ripple to indicate her whereabouts, and reappeared at the pleasure of the pilot. During the two hours' test,

Secretaries of the sections: mathematics and astronomy, Henry M. Paul; physics, C. Leo Mees; chemistry, C. F. Mabery; mechanical science and engineering, Geo. M. Bond; geology and geography, T. B. Comstock; biology, J. Henry Comstock; anthropology, F. W. Langdon; economic science and statistics, Wm. R. Lazenby. Treasurer, William Lilly.

— Twenty drops of bromine in an ounce of olive-oil, applied freely four times a day, and the affected part washed with warm water and castile soap twice a day, is said to have completely cured seventy-five cases of ivy poisoning.