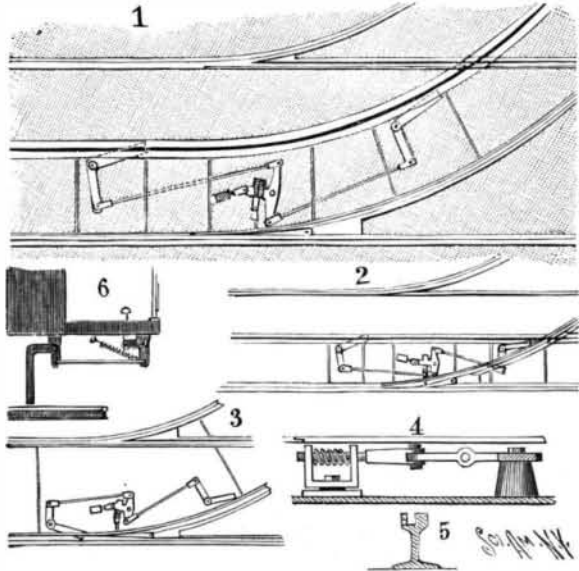


AN AUTOMATIC RAILWAY SWITCH.

A switch more especially designed for use on cable railways, but which may also be used in modified form with other street railways, is represented in the accompanying illustration, and has been patented by William Lickstrom, of No. 5 Manhattan Street, New York City. Figs. 1 and 2 are plan views of the switch



LICKSTROM'S AUTOMATIC RAILWAY SWITCH.

connecting a cable track and a track operated by horses or electricity, and Fig. 3 shows a modification adapted for use with railways of any kind, Fig. 4 representing a pivoted lever for throwing the switch and Fig. 5 a section of a special form of rail to be used, Fig. 6 showing one end of a car and its switch-operating lever. The switch point is connected by a link or rod to a bar movably retained by springs in a recess in a bell crank lever, from opposite arms of which extend rods connected at their other ends with bell crank levers pivoted close to one side of a cable conduit, the length of the rods being such that when an arm of one of the levers projects across the conduit slot the corresponding arm of the other lever lies alongside of the slot. In Fig. 1 the cable line is curved and in Fig. 2 it is straight, and a cable car coming to first the switch would be turned on the curve by the engagement of the grip with the lever arm extending across the conduit. As shown in Fig. 2, where the conditions are reversed, the car would be continued on the straight track. To hold the switch in either position to which it may be set, a rod or link connects one arm of the central bell crank lever to a pivoted guide rod under spring tension, as shown in Fig. 4, the spring resisting the throwing of the lever during the first part of its motion and assisting it during the latter part, thus acting to hold the switch in whatever position it may be placed. In the modified construction, for use with any kind of railway, a grooved guard rail is used, as shown in Fig. 5, the inner wall of the groove having a short longitudinal slot through which project the ends of the levers which in the other case extend over the conduit. The projecting ends of the levers are engaged and forced to one side by a lever extending down from the car platform, and thus made to move the switch point.

THE new mineral roeb-lingite is described by H. W. Foote and S. L. Penfield, in the American Journal of Science. It is a new silicate from Franklin Furnace, N. J. It is remarkable for containing sulphate dioxide and lead.

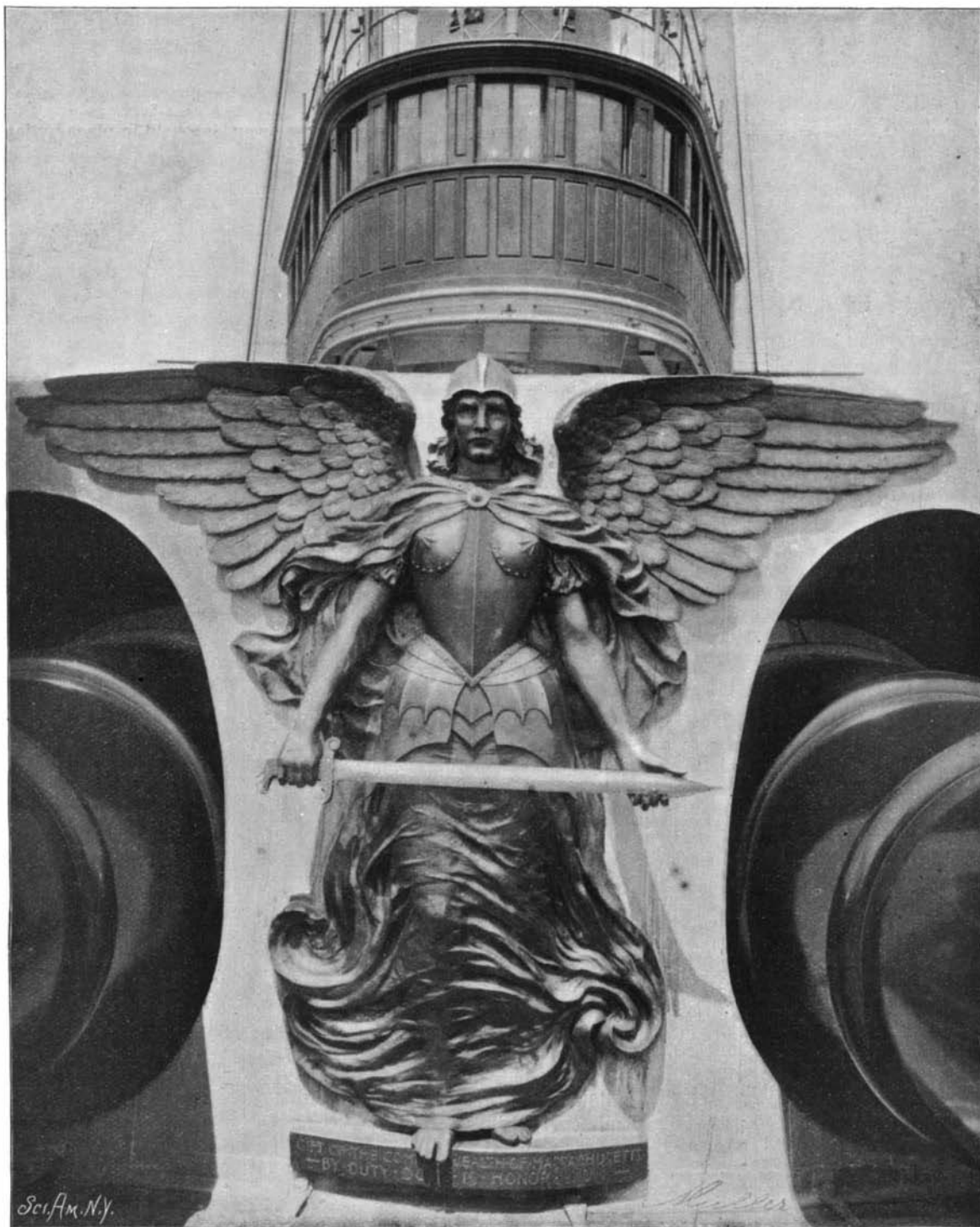
THE "WINGED VICTORY" FOR THE BATTLESHIP MASSACHUSETTS.

We present an illustration of the handsome emblematic figure in bronze, known as "Winged Victory," which is the gift of the State of Massachusetts to the battleship of the same name.

In some respects this handsome present is quite unique. In the case of all the other ships of the new navy, which have received gifts from the cities, towns or States after which they have been named, the event of their going into commission has been signaled by the presentation of handsome services of silver. One of the richest presentations of this kind was that made by the city of San Francisco to the cruiser of that name, when the ship was so overwhelmed with kindness that it has become a problem as to just where the silver shall be stowed—at least so says the New York Sun.

The gift of silver service made to the Brooklyn is valued at \$10,000, and the other ships have received presents of approximately similar value. The Massachusetts Legislature, however, decided to depart from the time honored custom and present its namesake with an emblematic figure in bronze, accompanying the gift with a request that it should be placed in some prominent position on the battleship, and preferably on the forward turret.

The figure is life size and represents a very striking and spirited figure of a woman clad in a helmet and corselet; her wings spread abroad over the port holes of the turret, and with her arms pendent she holds a massive sword, upon which the single word "Victory" is engraved. The base of the figure contains the inscription "Gift of the Commonwealth of Massachusetts." Below this is engraved the motto "By duty done is honor won." The sculptor, Mr. Pratt, who is still a young man, was born in Norwich, Conn., in 1867. He passed through the Yale School of Fine Arts and afterward studied under Augustus St. Gaudens in New York and under Falguière in the Ecole des Beaux Arts, Paris. He designed two of the large groups in the peristyle at the World's Fair, and he has won the approbation of the critics by six seven-foot figures for the front entrance of the new Congressional Library at Washington, the large twelve-foot figure of Philosophy

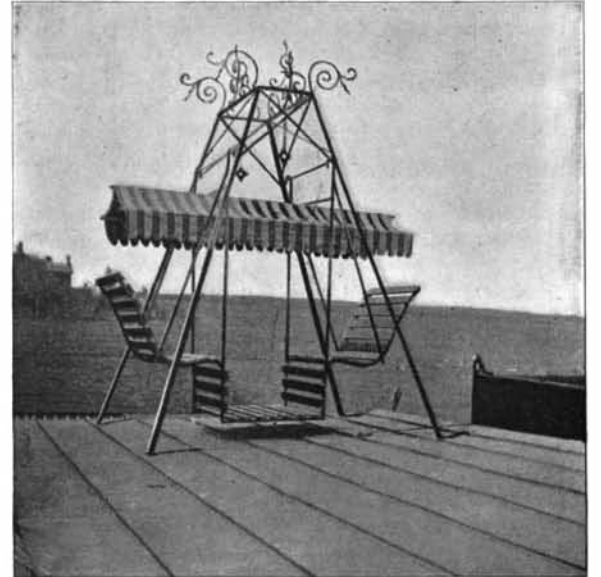


BRONZE FIGURE "WINGED VICTORY" ON FORWARD TURRET OF BATTLESHIP MASSACHUSETTS.

inside of the dome, and a series of massive bass reliefs of the same building.

AN IMPROVED SWING.

The illustration represents a double swing of perfected construction, all steel but the seats, having a large canopy top or adjustable awning, and with mov-



BAUSMAN'S STEEL SWING.

able reclining seats which may be adjusted at any angle. It is one of several varieties of swings, embodying late improvements, manufactured by D. H. Bausman, of Bausman, Pa. The swing shown in the picture occupies a floor space of 7½ by 5½ feet, and is 10 feet high. These swings are painted in lemon and raw sienna tints, and are shipped in parts, adapted to be set up in a few minutes.

Insanity in Animals.

Insanity in the human subject is supposed by some to have no analogue in the lower animals, says Popular Science News. Yet many causes, according to Dr. Snelison, will lead to the permanent loss of self-control. Cattle driven from the country through a crowded town will often work themselves into a frenzy. Horses have gone mad on the battle field. At Balaklava an Arabian horse turned on its attendant as he was drawing water, seized him in his mouth, threw him down, and, kneeling on him, attacked him like an infuriated dog. He bit off another soldier's finger. An instance is related of a docile horse suddenly going mad on a hot day. Everything that came in its way it seized in its teeth and shook as a terrier does a rat. It raided the pigsties and threw the inmates one after another in the air, trampling on the bodies as they fell. Afterward it almost killed its own master, after maiming for life the farrier who was called in. This must have been a case of insanity, the cause of which is often to be found in congenital malformations of the bones of the head. A scientist of authority even goes so far as to prove by what appears to be incontestable evidence that cats, dogs, and monkeys have been observed to have delusions very similar to those of insane people.

A SPECIAL dispatch from Naples, dated June 4, says that Mount Vesuvius is in eruption. An area of 2,000 yards long by 500 wide is covered with lava, and it is dangerous to approach within 400 yards of the principal crater.