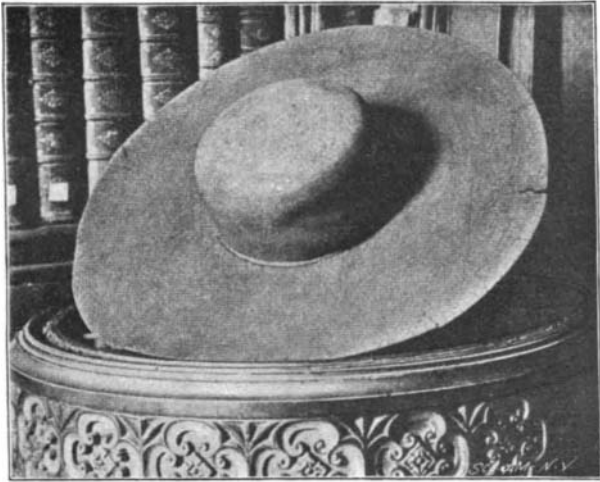


CARDINAL WOLSEY'S HAT.

Christ Church, Oxford, has secured a hat that once belonged to the great Cardinal Wolsey. Christ Church, Oxford, was founded by Henry VIII., in 1545, but, in reality, he merely adopted the magnificent work commenced by Cardinal Wolsey in 1524. It may be said that Christ Church, Oxford, is not a church, but a college. The great cardinal intended "Cardinal College" to be a splendid institution for the advancement of learning and a memorial of his own greatness. In order to create it he abolished monasteries, pulled down churches, collected costly vestments, and sent agents to buy manuscripts. A considerable part of the building was finished in 1529. He drew up statutes providing for a dean, fellows, and many graduates, scholars, and others, and appointed the first holders to



CARDINAL WOLSEY'S HAT.

these offices, and, curious to say, some of these turned out to be the pioneers of the Reformation. The college was at work when Wolsey fell, in October, 1529, and a year later the college was suppressed. Fifteen years later Henry VIII. re-established it under a new name, but the buildings were chiefly Wolsey's, and the endowments were taken from endowments provided by Wolsey.

Quite recently a new treasure was obtained by the college—a hat which is said to have been Wolsey's hat. While the pedigree of the hat is incomplete, it is ancient at any rate. For years it was one of the curiosities of the famous Strawberry Hill collection of Horace Walpole. When it was sold, it was bought by Charles Kean, the actor, who, it is said, wore it while he was acting. In 1898 it was exhibited at the Tudor exhibition, and in the same year it was bought and presented to Christ Church, where it will be very carefully preserved.

It has a large, flat brim of red felt; both brim and hat are absolutely round. The hat is 3½ inches high and 7½ inches in diameter. It is so very round that it is a wonder it could have been worn. The brim is perfectly flat and measures not quite 6 inches in width, so that the whole diameter of the hat and brim is about 19 inches. The tassels are lost, but the place where they went in can be seen. A narrow cord ran around the outside of the bottom of the hat along the inner edge of the brim and passed by two small holes through this edge, so that the ends of the cord could be brought together and tied. That it is a genuine cardinal's hat seems beyond doubt, but whether or not it is Wolsey's hat is, of course, open to question. We are indebted to Black and White for our engraving and for the foregoing particulars.

American Locomotives for the Barry Dock.

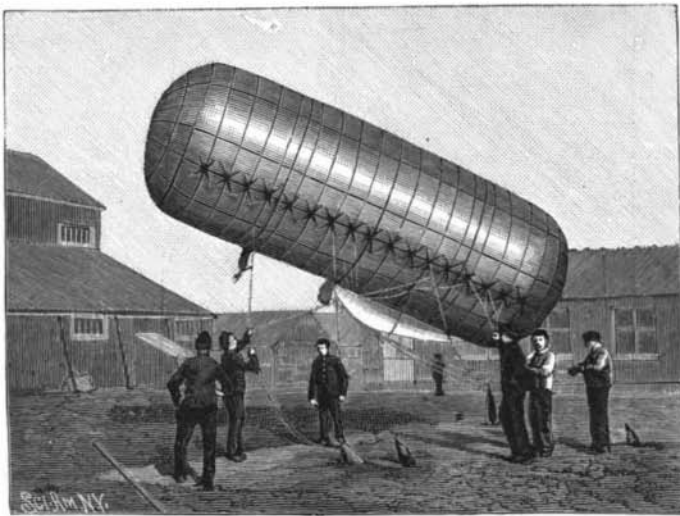
The directors of the Barry Dock have accepted American tenders for the construction of their locomotives. They get quicker delivery and the price will be about \$500 less per engine.

MILITARY BALLOONING.

The idea of using balloons in warfare is more than a century old, the first attempt made to put the project into execution being in the Revolutionary War of 1794. Napoleon organized a ballooning corps for his second campaign in Egypt, but, before it could be employed, the wagons containing the accessories fell into the hands of the British. During the siege of Paris, in 1870, balloons were used extensively, and news was carried by that means from the beleaguered city to the provinces. Among the latest additions to military balloons are searchlights, which are regarded as invaluable in night reconnaissances.

There is a military school of ballooning at Aldershot, says The London Graphic, which is wholly responsible for the theory and practice of aeronautics in the British army. This institution has not only to test every balloon destined for the service, but also to instruct those whose business it is to use the balloons, and to facilitate the employment of balloons generally in time of warfare. The balloon section of the Royal Engineers constructs all the appliances employed, with the exception of preparing and fitting the skins. All the nations of Europe are engaged in attempting to bring the science of aerial navigation to perfection. It is no doubt a serious matter to consider that, if ever the science were made really practical, not the finest navy ever seen could stop the destruction of a city by a military balloon armed with explosives. Experiments at Aldershot of late have been made with a balloon of a very different shape from that to which we are all accustomed. This new balloon is a weird-looking object, like a huge sausage floating in the air. It was, we believe, first tried in Germany. In the air the balloon floats at an angle of about forty-five degrees to the horizon. It is a somewhat complicated apparatus. In addition to the balloon itself there is a smaller balloon or bag attached, which has an open end, which inflates with air as the balloon moves. This helps to steady the balloon considerably. With the same object a small balloon, like a large football, is towed astern of the larger. This acts like the tail of a kite, and assists in keeping the balloon in the particular attitude it assumes, and also helps to maintain its steadiness. Oscillation is largely obviated, and special advantages for photographing are thus afforded. The little balloon at the tail also goes some way toward steering the balloon, for it enables the aeronaut to keep the head of what we will call the "sausage," for want of a better name, in a certain direction. This is a great advantage when the balloon is being towed, as, of course, it is generally captive. If let loose, the balloon would have to go before the wind, and the tail would still help in steadying it and keeping its head in the direction of the wind, which would never catch it athwart.

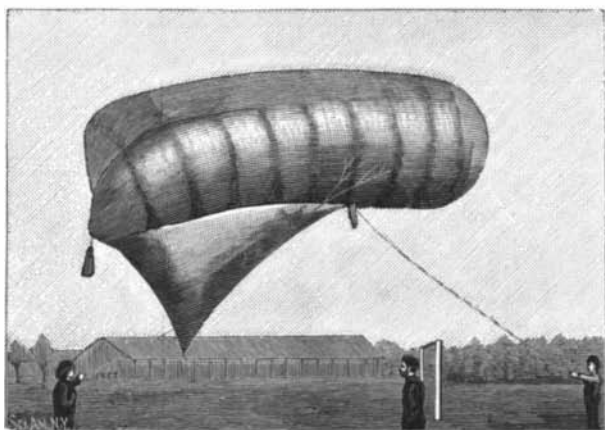
VESUVIUS was recently covered with a heavy snow fall while the crater was in eruption. The sight was a very strange one; three streams of red hot lava moving at one time through the white snow.



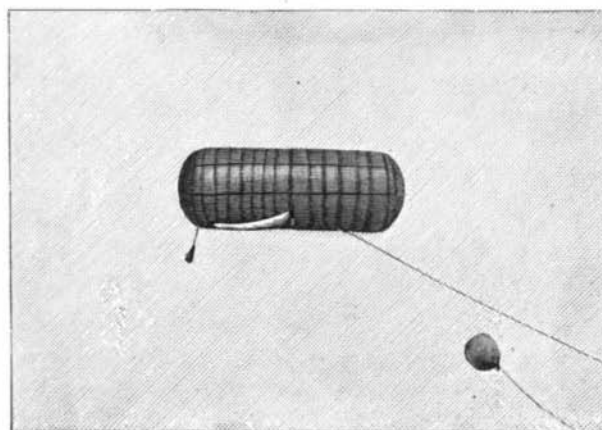
The Ascent.



Towing Home.



With Steadying Pouch Fully Inflated.



In Mid-Air.

AN ENGLISH MILITARY BALLOON.

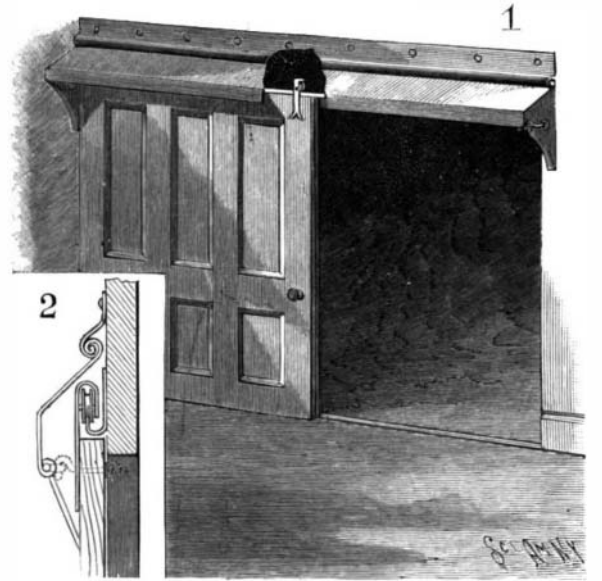
A CAP FOR SLIDING DOORS.

The illustration presented herewith represents an improvement in caps or devices for covering the tracks upon which sliding doors run, the improvement rendering it possible readily to repair the moving parts of the door-mechanism.

Fig. 1 is a perspective view of the device. Fig. 2 is a vertical section taken through the improvement.

Secured above the door opening is a plate which is bent to form a track for the door. Upon this track the door is hung by means of bars in which wheels are journaled, rolling upon the track. Above the track there is fastened to the wall a plate provided with an inwardly turned roll.

The cap which covers the track is also made in the



DOANE'S CAP FOR SLIDING DOORS.

form of a plate, but is provided with an outwardly turned roll intermeshing with the previously mentioned inwardly turned roll, so as to secure the two plates together and to form a hinge whereby the cap can be raised.

The cap extends down over the door and at its lower end is provided with a stiffening-rod held in place by a roll in the edge of the plate. At each end the cap is provided with eyes which are engaged by hooks. If it be so preferred, the eyes may be formed upon the ends of the stiffening-rod.

Should the wheels run off the track, or should the door become impeded, the cap is unhooked and swung up, thus enabling the necessary repairs to be made.

The cap has been patented by the inventor, Elias H. Doane, Tonica, Ill.

The Use of Peat Moss in Europe.

As we have had many inquiries concerning peat moss, we take pleasure in giving some additional particulars regarding this interesting substance which are furnished by United States Consul Listoe, of Rotterdam.

The largest dealer in, and exporter of, peat moss in the Netherlands writes him as follows: Moss litter is used for the bedding of horses and cattle, while the peat dust is used for disinfecting purposes; that is to say, by mixing it with manure the moisture of the latter is absorbed and there is no unpleasant odor. It is also used as a packing material for fruit. Mixed with molasses, peat dust forms a fodder for cattle. This is mostly made in Germany, and the sales of this molasses fodder are daily increasing. The peat dust is sifted from the moss litter; the peat fiber is used in Holland to make horse clothes and carpets and also antiseptic wool for dressing horses. A few years ago there was established at Maestricht works for making peat wool, but the enterprise was not a success.

No paper is made from peat moss in Holland, and it is not believed it is a fit material for paper making.