

of impact was very little felt; how little may be seen from the following fact. After the experience of one miss the crew returned to the cabin for the second round. This time the turret was severely struck; but the men came out thinking it was another miss. The apparent comfort of the kid, hen, and rabbit in the turret point the same conclusion, viz., that the work stored up in a shot is delivered on armor with no more shock to surrounding objects than the work—equal in quantity, which the same powder charge expends on the firing vessel.

Secondly, as to the penetration obtained by the projectiles, we noticed that the 35 ton gun at Shoeburyness rather exceeded what we should have supposed. On this occasion the reverse was the case. The 25-ton gun was fired exactly as given on the second line—that is, with a firing charge of 85 lb., and probably with a velocity of 1,300 ft per second. The line for the thick armor of the *Glatton* was pierced even a little past this range. We have noticed, however, that the shot did not strike perfectly fair, which with a circular form of the wall of a turret, makes more difference than in the case of a flat target. Further the projectiles were not those of the most recent construction, and being of the date 1870, where any manufacture is constantly watched and improved, a year and a half may make a sensible difference in the excellence of the product.

A VIKING'S VESSEL.

We learn from several reports in the Sagas that during the last centuries of Paganism (the younger Iron Age or the Viking-period, the period from about 700 till a little after 1000 A. D.), the dead on being laid to rest in the sepulchral tumulus were not infrequently put in a ship.

In this way according to the account of Snorre, Haakon the Good, having conquered the sons of Gunhild at Restarkalv, ordered the conquered ships to be drawn up on shore; the slain were laid in them, and earth and stones were then heaped on the top, or in other words, tumuli were raised over them. Even women were sometimes interred in this manner. Now and then tumuli have been found in Norway and Sweden, which also contained ships, and thus confirmed the accounts of the Sagas, concerning that peculiar mode of interment. But in all cases, which have hitherto come under notice, the ships, as might easily be expected, were so much injured after having laid so long in the earth, that only few traces of them remained.

A Norwegian tumulus has, however, lately disclosed a vessel from the younger iron period, which has, to a considerable extent, resisted the decay of time. The discovery was made in the parish which has preserved the most remarkable, and probably the oldest, of Norwegian Runic stones, viz., the Parish of Tune in the Amt of Smaalenene. It had been a report in that district, that a ship was buried in this mound—probably some one had come upon it during a former excavation—which, as we know, was made in the first half of last century. Trusting to this report, the present owner of the farm, Ole Arolsen, some years ago, began a search for the ship. After several fruitless attempts, he at last found one end of it by entering the mound on the northern side. By continued excavation he had gradually uncovered a large part of its inner sides, when last September, an officer of the Norwegian navy, Lieutenant H. Basse, accidentally

came to the knowledge of the discovery. He presumed the proprietor to stop the excavation and reported the discovery to the Society for the Preservation of Norwegian Antiquities. The Society then ordered the excavation to be finished under skillful supervision.

The vessel stood in the mound on a level with the surrounding surface of the earth, in the direction of N. N. W., and S. S. E., a little lower in the southern than in the northern end. It is clinker built, with iron nails, and made almost exclusively of oak; only the ribs and the wooden nails, which are found at some places, are made of fir. The keel, which is made of a single piece of wood, and quite undamaged, is 43 1-3 feet in length, and more than 13 feet wide amidships. The perpendicular height from the keel to the gunwale cannot have exceeded four feet. As will be seen from these measurements, the vessel has been very flat and low. Both ends are almost alike, and both very pointed, so that one can be in no doubt which is fore and which aft. There was no deck, and no trace of thwart to be seen; in consequence the number of oars cannot be known. To judge from the number of the ribs it may, however, be concluded that there have been ten on each side. This vessel however has not been propelled by means of oars alone; it has also had sails, and the way in which the mast was secured is one of the most peculiar points about it. In the space just behind the mast beam lay some unburnt bones of a man and horse, two beads of colored glass, some cloth compactly rolled together, and four small pieces of carved wood, which appear to be fragments of a saddle. Near the prow, at the eastern gunwale of the vessel, the handle of a sword, of the form used in the Viking period, was clearly distinguished; nearly opposite, on the western side, the point of a spear and the boss of a shield seem to have laid. Just where the prow must have been, laid a long, heavy lump of iron rust, apparently a fragment of a rolled up coat of mail. On the western side of the gunwale about opposite the mast there was a heap of horse-bones. The beads and the pieces of cloth indicate that the body was buried with clothes on. By his side a horse and saddle, harness and snow skates were laid. Thus he had ship, saddle, horse and snow-skates with him in the sepulchral tumulus.

We have then here considerable fragments of a vessel undoubtedly belonging to the Viking period. It can hardly be supposed that this is one of the ships on which the Norwegians of that period make their bold Viking expeditions in the Baltic, the North Sea, and the Atlantic. A vessel so small in size, and built so low and flat could not be adapted to long voyages in the open sea; it can only have been used for coasting trade and shorter expeditions. The discovery however is of great value. It is the only vessel extant from the Viking period, and as far as is known, the most ancient which has been preserved, with the exception of one in Denmark.

The Society for the Preservation of Norwegian Antiquities has had the vessel and the other articles found in and about it brought into Christiania, and has presented the whole to the collection of Norwegian antiquities belonging to the University.

The Boston *Daily Globe*, who is likely to be well informed on the subject, has a leading article "The Indians Again." It must be of interest to all who have friends and relatives in the "Far West," therefore we copy it:

Private letters reach us from the extreme West, which corroborate the briefer despatches by the telegraph; saying that a reign of terror exists among the whites upon the frontier. Hostile tribes make no concealment of their purpose of exterminating the white settlers in Dakota, Montana and the surrounding region. Peace counsels are no longer heeded; the United States commissioners acknowledge themselves powerless, and the last argument has been employed in vain by the advocates of the Quaker policy. Cavalry and infantry are loudly called for, and army officers telegraph that the entire length of the Yellow stone valley swarms with armed Indians in fighting organization. The number is placed by the official agents of the government as high as fifteen or eighteen thousand warriors. This begins to look serious, and our readers will perhaps sympathize more fully, now, with the course of the *Globe* upon the matter of the Indian policy and of the administration.

The United States surveying expedition, now in Dakota, has already had seven severe fights with the savages, who attack them at every opportunity, and were not this small band of white men under military discipline and well armed, they would have been murdered to a man before this time. As it is, we understand that the Government has given order for their recall from the duty on which they were sent, fearing less they should be totally annihilated by the red skins. There is the whole United States army to protect these men than give one inch of ground in the way of retreat! This is the moment to teach the savages what war means. If they desire to perpetuate it, and to ignore all advances made by the lenient Washington Government, let it be sharp and decisive. The Indian nature is that of the wild beast; instinct shows him when his enemy hesitates, which he does not fail to attribute to cowardice, and to act accordingly. The history of the bloody deeds of these tribes upon the frontier-men and their families, for the last year alone, is quite sufficient to excuse and warrant the most severe and decisive measures against them. They are now banded together in hostile array; let their punishment be such as shall end the war between the red men and this Government. Punishment, to be efficacious, should be certain, and proportionate to the offence; no vacillating policy can be any longer relied upon.

One letter, now open before us, the writer of which we know personally as a reliable and experienced individual, just arrived at Omaha, says: "As it regards the surveying expedition, it is generally feared and believed that a combined attack will be made upon it by the savages, and in such force as to insure its destruction, unless government troops be sent in sufficient numbers to protect it, and escort the party out of the country. There is but one opinion among the settlers, from the Missouri to the Pacific, and that is that the Indians must receive, at once, a terrible and decisive punishment, or else the whites may as well abandon their claims and return eastward." We do most earnestly urge the government to awake from the spirit of pusillanimity which has so long controlled its Indian policy, and to take the decided and merciful view of the situation which demands a stern, brief and effective war upon these murderous tribes. We say merciful, because these years of daily weekly and monthly massacres and fiendish tortures would, perhaps, be, by one determined blow ended forever.