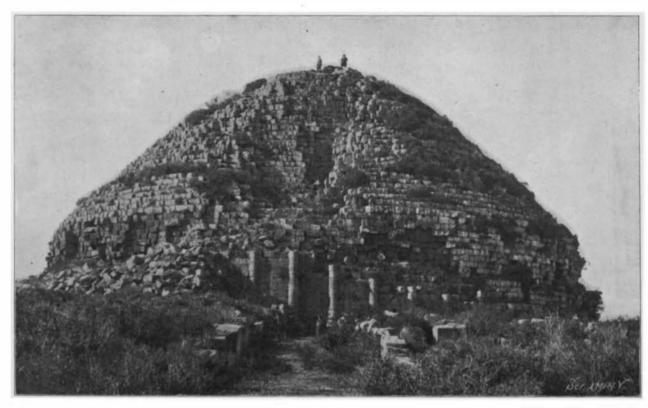
Scientific American.

BURIAL MONUMENTS OF NORTH AFRICA.

In North Africa are found two great burial tumuli or mausoleums, which date even before the Roman occupation, and were, no doubt, built by the native kings of Mauretania and Numidia. The first of these, shown in the engraving, it situated near the coast of the Mediterranean, about thirty miles from Algiers, and was at that period near the ancient port of Cæsarea (now Cherchell). It stands upon a high

hill in the narrowest part of the Sahel range, and thus dominates the surrounding country. Its form is that of an enormous cylinder resting upon a square foundation and surmounted by a cone-shaped part which is built up of a series of steps reaching to the summit. At the base it measures 197 feet in diameter, and its present height is 102 feet, but it must have been over 120 feet high originally. For the construction, cut stone of large dimensions is used -disposed in symmetrical order and united by tenons of lead. The lower part is ornamented with sixty semi-circular pilasters, which appear to be applied against the wall, but really form part of it. The pilasters had Ionic capitals and supported a cornice of simple profile. At the four car-

dinal points were four ornamental panels or false doors, whose moldings imitated by their disposition a great cross inclosed in a frame. Before the eastern panel, and perhaps attached to the body, was an exterior structure or portico of rectangular shape, of which only the base remains. This monument remained an enigma for a long period. The Arabs called it Kbour-Roumia, or Tomb of the Christian, on account of the cross upon the northern panel, which was still preserved, and their imagination invented many legends in which were associated buried treasure, fairies and sorcerers. In the sixteenth century these legends were added to under the Spanish dominion, and it was assigned as the burial place of different important personages, but all without the slightest foundation. These legends excited the Pacha Salah-Raïs (1552-1556) to try to find the hidden treasure, and he had the monument cannonaded; but, although he made a large breach in the western side, he was not able to lay bare the chamber containing the riches. Later on, Baba Mohammed ben Otsman, pacha of Algiers (1766-1791), demolished the revetment wall on the east side in the same way, but without any better result. What was more destructive to the monument than the cannonading was the removal of the lead tenons to make bullets, and



SO-CALLED TOMB OF THE CHRISTIAN, SUPPOSED TO BE THAT OF JUBA II., LOCATED 30 MILES FROM ALGIERS.

thus a great number of the stones were overthrown.

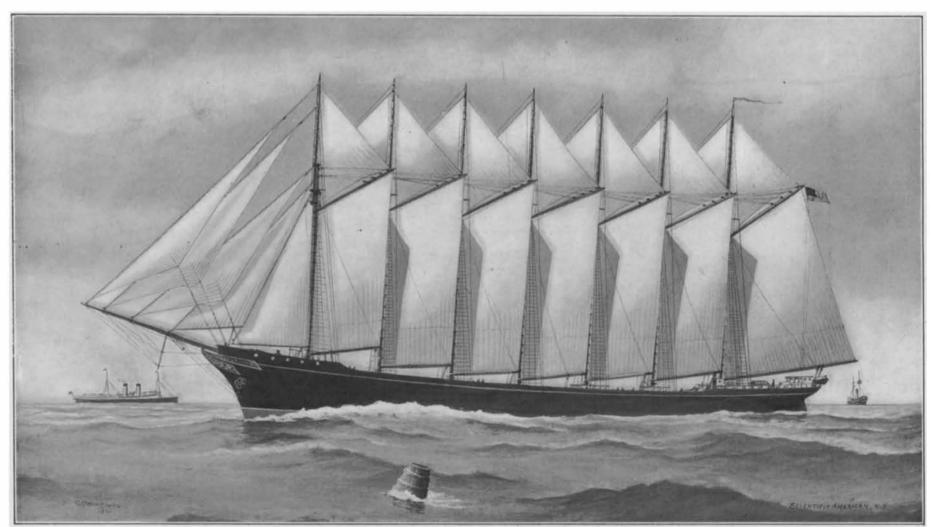
The first regular excavations were made in 1865-66 by Berbrugger and McCarthy under Napoleon III. They cleared away a part of the outer wall, and made soundings to find an internal cavity, but it was only after four months that it was found. By a tunnel under the south panel they arrived in a vast gallery, admirably preserved, and thus discovered the internal arrangement of the structure. The entry is a low, rectangular opening below the ground and in the foundation masonry, in the rear of the rectangular structure previously mentioned. It was closed by three stones which were flush with the rest of the masonry. Beyond the entrance is a sliding door formed by a flat stone moving up and down in grooves, which could be held up by posts. After a short and low corridor, another such door leads into a vaulted chamber 16½ feet long, 8 feet wide and 11 feet high. On the right-hand partition are sculptured in rather primitive fashion a lion and lioness facing each other above a second corridor. The latter is also closed by a stone door. At a short distance a stairway of seven steps leads up to the main gallery, which is on a level with the ground. This gallery is 6 feet wide and 7½ high, and was lighted by lamps placed every 10 feet in niches, and traces of the smoke may still be

seen. After making almost the entire circuit, the gallery turns abruptly and comes to the center, reaching a narrower corridor with a sliding door like the first. Beyond this is a small vaulted chamber 121/2 by 41/2 feet. A few beads of precious stone and pieces of jewelry in a vitrified material were found here. An: other corridor with sliding door leads into the main chamber in the center of the monument measuring 10 by 121/2 feet. The three walls opposite the door have each a small niche. Unfortunately, nothing whatever was found in this vault. The gallery, chambers and corridors are paved with large flags and built of well-cut stone. The body of the monument is solid, and consists of rough stone and tufa blocks, irregu-

larly placed and joined by a mortar of red or yellow earth. It was found that the monument had been entered once, or perhaps several times, for the purpose of pillage. The stone doors were broken, and whatever objects it contained were carried off long ago.

A SEVEN-MASTED STEEL SCHOONER.

The development of the multi-masted merchant schooner, which has advanced with such rapid strides during the past few years, is one of the most remarkable features in the shipbuilding industry of the Atlantic Coast. The fore-and-aft schooner has always been a favorite type of ship in the American merchant trade, whether coasting or deep-sea, and the great breadth of hull and length of spars of such craft have rendered them an easily recognized type



Length over all, 395 feet; beam, 50 feet; moulded depth, 34 feet 5 inches; displacement, 10,000 tons; deadweight cargo capacity, 7,500 tons; height mainmast, step to truck, 182 feet; total sail area, 40,817 square feet,