

plateau of sandstone rock covered with large black boulders. On the west lies a Wady, which drains a part of the western side of the hills. This Wady runs in a southerly direction at the foot of the plateau, and is thickly covered with grass, but not many trees. It is crossed by the proposed line in a somewhat easterly direction, and it then runs parallel to it, and within a few hundred yards on the west bank, over a sandy deposit and black shingle. In the Wady bed are situated the wells of Abou De-leah, into the desert of which name the line now enters, near the course of a valley well covered with grass and trees, but following the sidelong ground of some extensive granite and porphyry hills, the lowest ridges of which afford easy rising gradients. Very careful examination at this point showed again that the camel track was the only available route, and this, which goes to El Metemmeh, is followed with but few deviations. At a point about 530 miles from Wady Halfa it was decided to run straight for Shendy, passing for some distance over a plain very similar to those already described, covered with sand and black boulders, and succeeded by a more favourable district, which is, during the heavy rains, capable of cultivation; a little further occur the wells of Shebaet, about two miles to the west of the railway, which finally terminates its course in the west bank of the river Nile, opposite Shendy, 552 miles from the northern terminus of Wady Halfa. El Metemmeh, lying about 3 miles to the south, is the town where the caravan route ends, and standing near the west bank of the Nile, is separated from the desert by a low line of hills. A considerable tract of fertile land, dividing the town from the river, is occasionally inundated during the season of floods. El Metemmeh contains about 3000 inhabitants, and owns a sheikh and dervish; although possessing a bazaar, a market is held here twice a week, where an abundant supply of all native products is to be obtained.

#### SODA WATER MACHINERY AT THE VIENNA EXHIBITION.

Abounding as it does in objects of interest and usefulness, the Vienna Exhibition does not include many matters of greater interest, with the thermometer at 90° in the shade than the soda water machinery shown. If proof of this assertion be needed, it is to be found in the constantly thronged condition of the pavilions which are met with at various points in the grounds of the Exhibition, where American iced drinks are dispensed, as well as the crowded state of the numerous stands in the Exhibition devoted to the same purpose. These pavilions—one of which is constructed adopted; the sharpest curves (a quarter of a mile radius) upon this division were here introduced in three places, elsewhere upon this length the sharpest being half a mile radius.

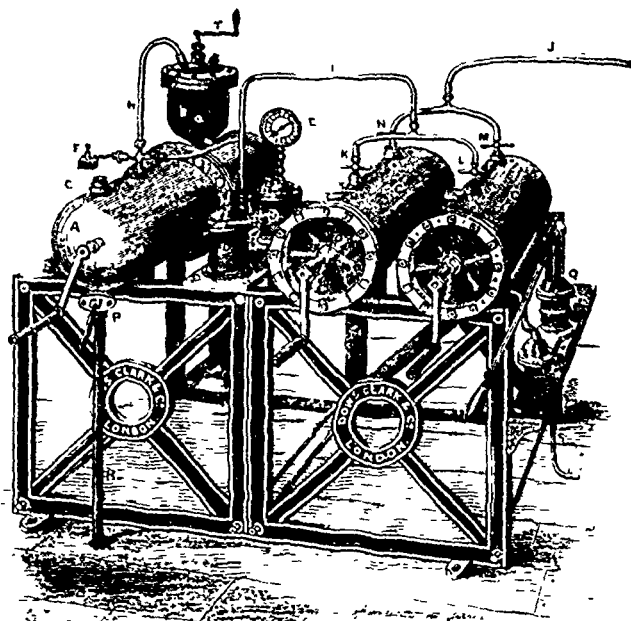


FIG. 1.

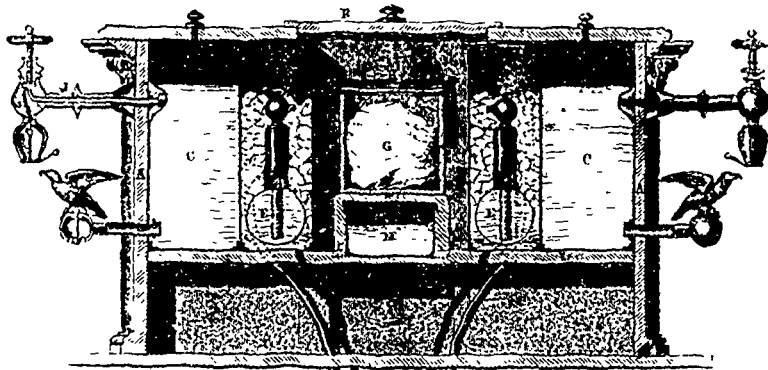


FIG. 2.

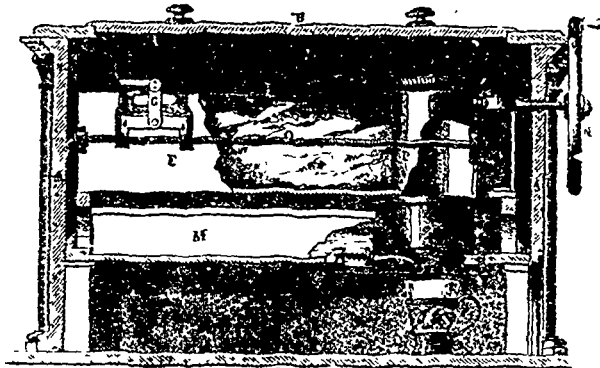


FIG. 3.

#### SODA WATER MACHINERY AT THE VIENNA EXHIBITION.

CONSTRUCTED BY MESSRS. DOWS, CLARK AND CO., LONDON.

After crowning a ridge of black porphyry and sandstone rock, the line takes a somewhat more easterly direction, and alls gently, the ground being favourable, and consisting of a