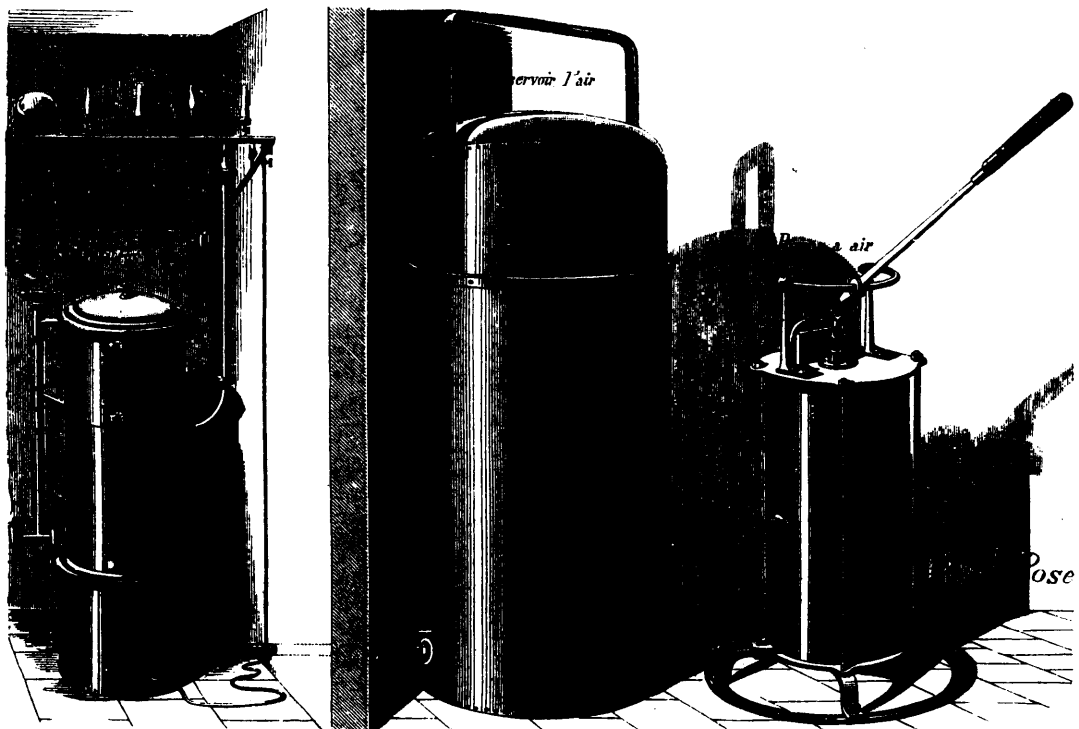


THE 81-TON GUN.

The 81-ton gun when completed, will consist of an inner tube of first steel weighing 16½ tons as a forging, and measuring 24 feet, 7 inches in length, and 5 inches in thickness, except at the breech end, where it is greater, and the muzzle where it is less. It will have a bore 24 feet in length, and a primary calibre of 14 inches. This calibre will ultimately be increased to 16 inches, but the gun will first undergo a series of trials with the 14-inch bore. It will then be bored out to 15 inches: will be again experimented with and subsequently bored out to the final calibre of 16 inches, thus giving the steel tube a mean thickness of 4 in. It will be rifled with 12 grooves, 2 inches deep and 1.5 inches wide with an increasing twist. The gun is composed of seven pieces, namely: five wrought-iron coils, the steel tube, and the cascabel.

See page 303 for further description.

BORING THE TRUNNION COIL.



APPARATUS FOR PRODUCING GAS INSTANTANEOUSLY.