PORTABLE FOUNTAIN WATER CLOSET.

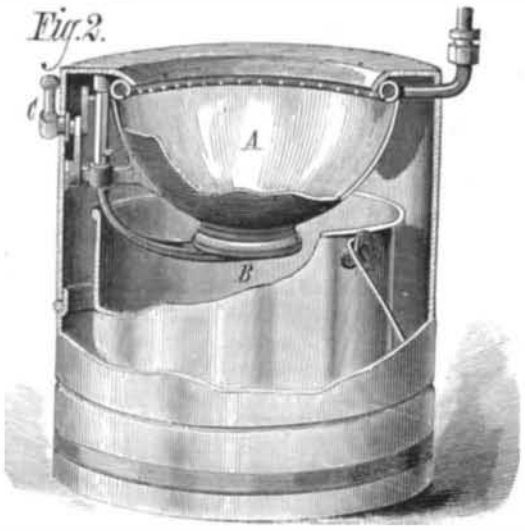
The article shown in the annexed engraving is one that should form a part of the furniture of every house, and is especially valuable for invalids and the aged. It is also a great convenience for persons in health, particularly in the country, in cold and inclement weather and at night; and as a sanitary provision it will prove beneficial in several ways. It will permit of a prompt obedience to nature's laws, and thus save both health and the cost of medicines and medical attendance. It is perfectly air tight, and is consequently odorless. It is readily moved from one room to another, and if it becomes necessary to pack it for storage or for transportation, all of the parts may be placed in its lower casing.

The inventor has arranged the fountain in connection with the lower portion of the casing, so that it may be used as a shower bath, a perforated nozzle being provided for this purpose.

The device is contrived so that it may be concealed in

PORTABLE FOUNTAIN WATER CLOSET.

an ottoman or easy chair. The bowl, A, is furnished with a circular perforated pipe at the top, through which water is admitted from the flexible pipe connected with the fountain. The valve, B, at the lower end of the bowl is operated by the lever, C, which when raised first drops the valve, then swings it to one side. When this lever is depressed it first brings the valve under the bowl and then raises it up against the soft rubber packing at the bottom of the bowl. The joint between the bowl and valve is practically air tight, and the water always left in the bowl seals the joint perfectly. All other joints in the apparatus are sealed with flexible rubber packing rings.



PORTABLE FOUNTAIN WATER CLOSET.

In connection with the fountain an enema jet is provided, which can be used without the slightest inconvenience.

We are informed that a number of these closets have been in use in cottages at watering places and in other summer resorts, giving great satisfaction. They also attracted a great deal of attention at the late Fair of the American Institute, and were awarded a diploma.

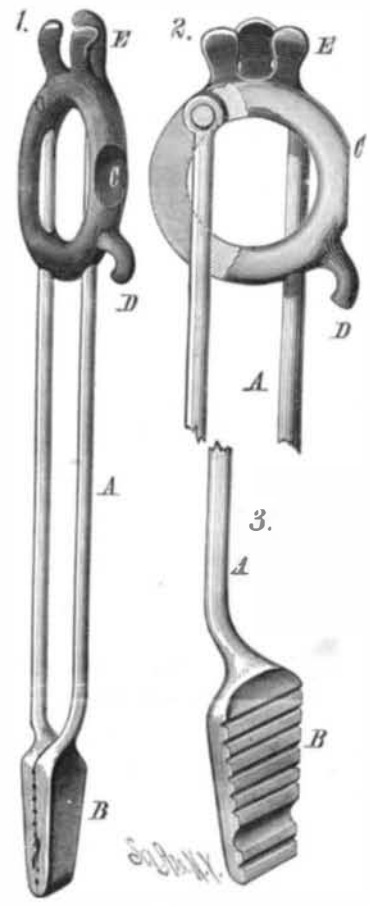
This invention was recently patented, and is being manufactured at No. 243 Water street, by the Portable Fountain Water Closet Company, M. J. B. McQuillin, manager. The post-office address of the company is Box 2279, New York city.

STEAMBOATS FOR SOUTH AMERICAN RIVERS.

Messrs. Yarrow & Co., Poplar, the well known builders of swift torpedo boats, have been recently building two shallow draught stern-wheel steamers, intended for the conveyance of the mails on the river Magdalena, for the Government of the United States of Colombia. These vessels are put together temporarily in the yard at Poplar, and are then taken to pieces and shipped out to their destination. Each vessel is 130 feet long, has 28 feet breadth of beam, and draws 16 inches of water when without cargo and having the steam up, but 26 inches with 90 tons of cargo aboard. The hull is built of steel varying from three-sixteenths inch to one-fourth inch in thickness. It is divided into eighteen water-tight compartments, so as to localize any damage through being penetrated by rocks or snags. All the forward part of the vessel below water is treble riveted, as an extra precaution. The boiler, which is of the locomotive type, is placed on the main deck forward, and the engines on the main deck aft, and thus easily accessible. To obtain the greatest economy of fuel the engines are made on the compound surface condensing system, and for the sake of lightness all the working parts are of steel. They are probably the first compound engines ever fitted to stern-wheel steamers. The cylinders lie one at each side of the vessel, and work direct with a connecting rod on cranks at each end of the axle of the wheel. They are expected to develop 350 to 400 horse power, and have some peculiar arrangements to adapt them for the service. The vessels have what may be termed spoon bows; the sterns retain their full breadth, rounding up gradually from the flat bottom to above the water line, and thence upward square. There are three rudders at the stern before the wheels, the center one being a balanced rudder and the other two of ordinary form, the shaft or rudder head extending up from the center one, and the side rudders moving parallel to the middle rudder by means of a connecting link. In the bow, before the boiler, there is fitted a steam capstan for heaving or working the vessel, if necessary, past a rapid. Alongside the boiler, in connection with the fan engine, is to be fitted a circular saw for cutting up the wood fuel. A speed of between fifteen and sixteen miles an hour, at least, on a continuous run, is anticipated from these boats. This, considering the extremely light draught of water, will be a very remarkable result.

IMPROVED TONGS.

The engraving shows an improved tongs designed expressly for household use, and containing several useful implements in one. A ring, forming the head of the tongs, receives the fixed and the movable leg, and has three projections, E, at the top forming a plate lifter, a hook, D, for lifting stove covers and pots and kettles, and a flat roughened, C, forming a hammer face. The jaws of the tongs



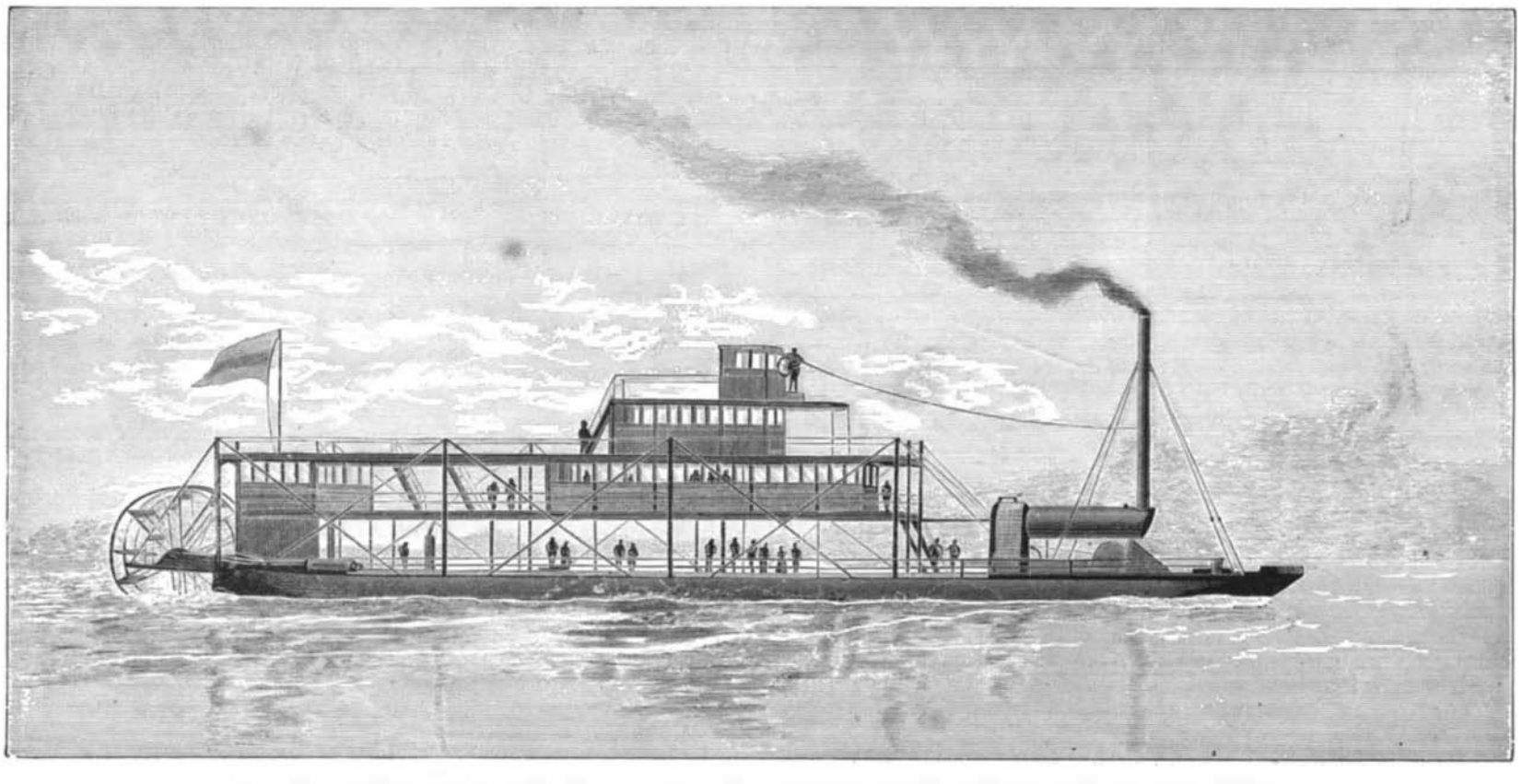
BOARDMAN'S TONGS.

are made angular and oblong in form, so that either of them may be used as a stove cover lifter.

This invention was recently patented by Mr. I. R. L. Boardman, of Snedekerville, Pa.

Prolongation of Life.

Some years ago the French Ministry addressed a circular to all the prefects, desiring them to institute inquiries as to the conditions which appeared peculiarly to favor longevity



STERN-WHEEL STEAMER OF STEEL FOR RIVER MAGDALENA SOUTH AMERICA.

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