

## THE LAMP-POST UP TO DATE.

## A NOVEL EXPERIMENT.

To the invention of penny-in-the-slot machines there seems to be no end. When this mechanical merchant was first utilised for the supply of post-cards and stamped envelopes, it was not entirely successful; and, as a consequence, the first form of this contrivance has disappeared. With, however, the substitution of sweetmeats for the

reader would suppose that the water is in some way boiled at the top of the lamp where the gas jets are, but it is not.

A curious and an interesting scientific principle has been utilised by the inventor. Water from which the steam escapes cannot be raised to a higher temperature than  $212^{\circ}$ ; but the temperature of steam may, by confinement, be indefinitely increased, and such steam brought into contact with water imparts to it its superadded heat, and thus the temperature of the water is advanced until boiling point is reached. A small quantity of the water is raised from the large tank at the base, and passes through coils of pipe suspended over the flame. This small quantity of water is converted into steam having a temperature of  $280^{\circ}$  or so, and this steam passes down an insulated pipe into a one gallon cistern (which has been automatically filled with water from the large tank), and in three minutes the water boils as indicated by a thermometer in view of the intending purchaser.



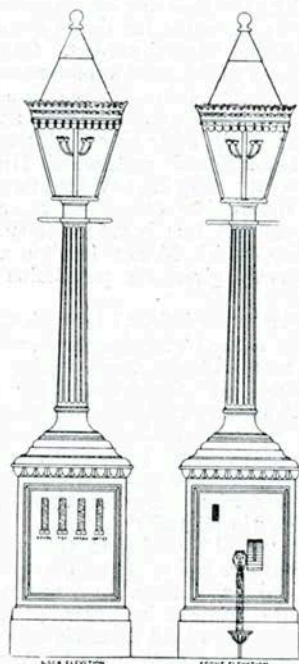
THE LAMP AT WORK.

vehicles of correspondence, a larger amount of public patronage was secured; and to ensure its final success it needed only to become the victim of the witticisms of our comic press, whose butt it very soon was made. Nothing seemed too absurd for suggestion. It was held up to public ridicule as a kind of universal provider through which anything from a pin to a menagerie might be obtained; or which might perform any operation from brushing a hat to extracting a tooth. Fact, however, is sometimes stranger than the clever speculations of Mr. Punch and his friends. Even their temerity never ventured to suggest what is now an accomplished fact.

Our illustrations show what appears to be a very handsome street lamp. It has a higher object in view, however, than to rival the great orb of day, as may be gathered from the legend inscribed upon its base, which is as follows:

"To obtain one gallon of hot water put  $\frac{1}{2}d.$  in the slot, pull the handle and hold it down until the quantity required is delivered. After pulling water wait a few minutes for each gallon drawn."

A thermometer indicates the heat of the water, which boils at  $212^{\circ}$ . The base of the lamp is nothing less than a water tank capable of holding 50 gallons. Looking at our illustrations the



"A CUP OF TEA FOR A PENNY."

The first of these lamps was erected at the Queen's Model Buildings, Southwark, London, and our first illustration gives a view of this lamp in operation. A further advance has been made in the case of a lamp erected in Leicester Square, London, which supplies coffee, cocoa, tea and bovril in the form of tabloids, with sugar and milk in powder form.

The Hot Water Lamp is an undoubted acquisition, and a boon to our poorer neighbours.