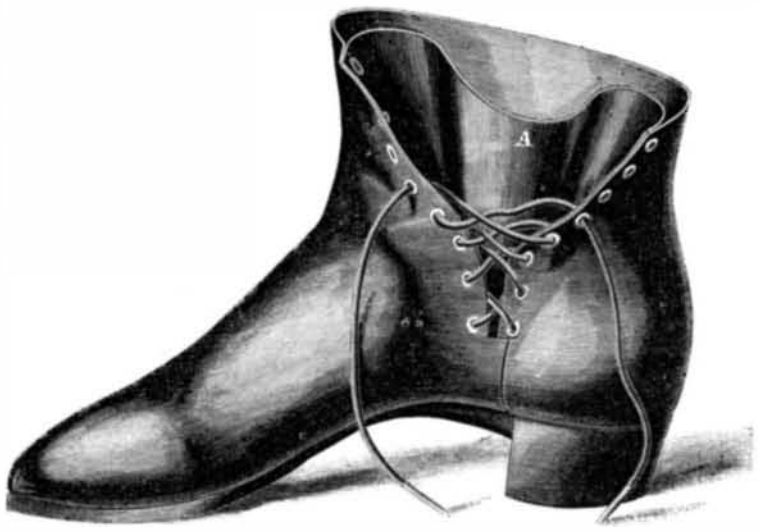
Improved Gaiter.

The ordinary tongue piece inserted in shoes and gaiter boots is more trouble than benefit, for it is generally found curled up in the toe of the shoe, or else is soon pulled out and thrown away by the impatient wearer, who takes this summary method of disposing of a nuisance. The attachment here shown is not, in common phrase, a tongue, but serves the same, and, in fact, a better purpose than the part in question.

It consists of a leather flap, A, sewed to each side of the shoe, as clearly depicted in the engraving. By this plan the shoe is rendered more sightly—more comfortable to the wearer, and excludes dust and wet much more effectually than the common tongue. This lining can be applied either in front, at the side, or in the rear of the shoe, and can be ornamentally stitched or embossed in any manner to suit prevailing fashions. It is a useful improvement and should become popular.

It was patented through the Scientific American Patent Agency on Sept. 19, 1865, by Thomas Powell. For further information concerning the sale of State rights, or entire patent, address him at Richland, Indiana.



POWELL'S IMPROVED GAITER.

AMERICAN TORPEDOES IN ENGLAND.

Our old friend, G. W. Beardslee, is making a great noise in England with torpedoes for blowing up vessels. It has been well known since the time of Fulton that there is no difficulty in blowing up any vessel by placing a sufficient quantity of gunpowder beneath her keel, and setting fire to it; the only difficulty is in getting the vessel just over the powder, and then setting the powder on fire. The most approved method of firing the powder is by electricity. Two insulated copper wires are lead from a galvanic battery—one from each pole—into the mass of powder, and their ends are connected by a smaller piece of platinum wire. This platinum wire, being a poorer conductor of electricity, refuses to carry all the current, and, as Tyndall would say, a portion of the electricity is converted into heat—at all events, the platinum wire becomes red hot and fires the powder. This was employed a number of years ago by Prof. Maillefert in blowing up the rocks in this harbor and Hell Gate. Mr. Beardslee's improvement consists in substituting a fine line of plumbago for the platinum wire, which enables a much feebler current of electricity to be employed. He inserts the ends of the two copper wires into a cork about half an inch apart, and marks the cork between the two with a lead pencil; on establishing the electric current the pencil mark is heated, and the gunpowder fired. Before Mr. Beardslee left for England, he said that he had, by this arrangement, fired a torpedo in Washington with electricity generated by a machine situated in New York.

A Good Washing Machine.

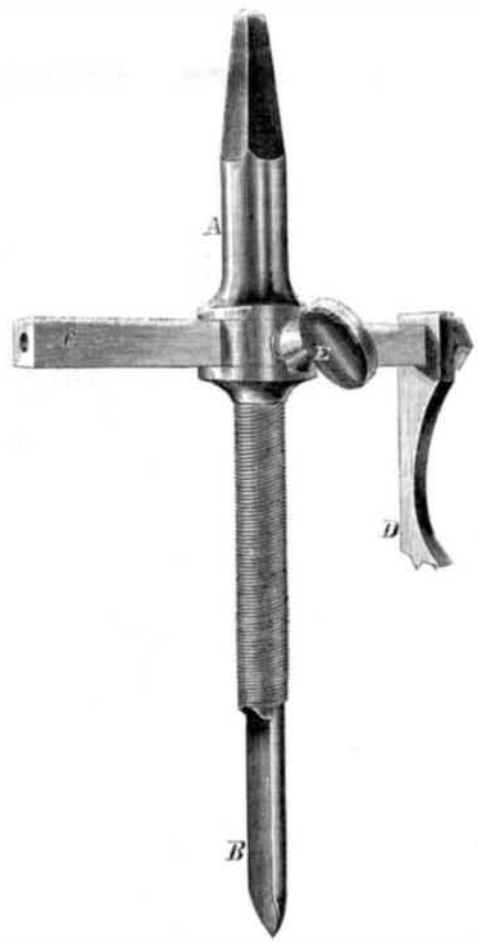
One of the best labor-saving machines ever introduced into a household is a good washing and wringing machine. No class of patented machines so much interest the good housewife as the washing machine and wringing attachment. The terrors of washing day exist no longer where a good one is in use, and any of our readers in want of a first-class machine—one that has no rival, to our knowledge—are advised to send to Messrs. Oakley & Keating, No. 184 Water street, for a circular, and then purchase from them such a size as they may require.

BRODHEAD'S BORING TOOL.

Wood workers and others often find it necessary to make holes of large diameter in their work. To do this a bit is commonly used, a number of small holes being bored around the circumference of the circle, and the segment left afterward removed by a chisel or saw. This process is not only slow but very rude, for it is impossible to make a true hole by the plan mentioned except at the expense of time.

With the tool here shown, a perfect circle can be easily made, and the hole handsomely finished at one job.

The details are simply a rod, A, furnished with a fine threaded screw, and formed into a boring bit, B, at the end; also a crossbar, C, sliding in a mortise in the rod, A. The crossbar carries the cutting tool, D, which can be set at any distance from the center within its range and held there by the thumbscrew, E. The operation is too obvious to require explanation. It is used with an ordinary brace, or may be attached to a lathe, and the cut is made continuous by the fine feed screw on the shank of the rod, A.



This desirable and efficient tool was invented and patented on August 8, 1865, by Wessel Brodhead, of Rondout, N. Y., and assigned to C. L. Edmonds, of the same place, all through the Scientific American Patent Agency. For further information address Mr. Edmonds as above.

THE receipts of the Government from internal revenue, since June 30th last amount to $137,365,382.

FROM THE STEAM PRESS OF JOHN A. GRAY AND GREEN