(No Model.)

D. S. ROBINSON.

WRENCH.

No. 464,084. Patented Dec. 1, 1891.

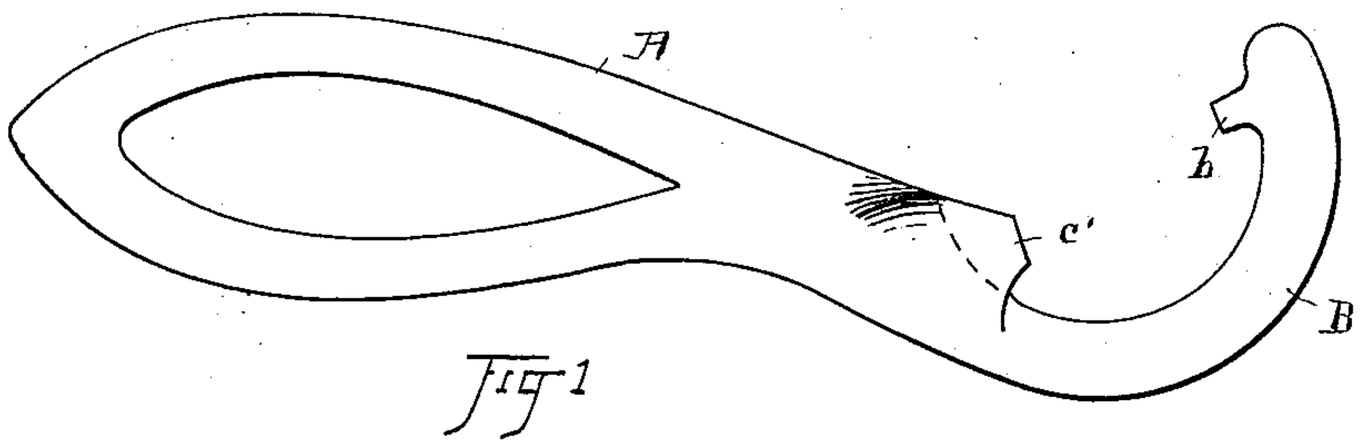

Fig 1

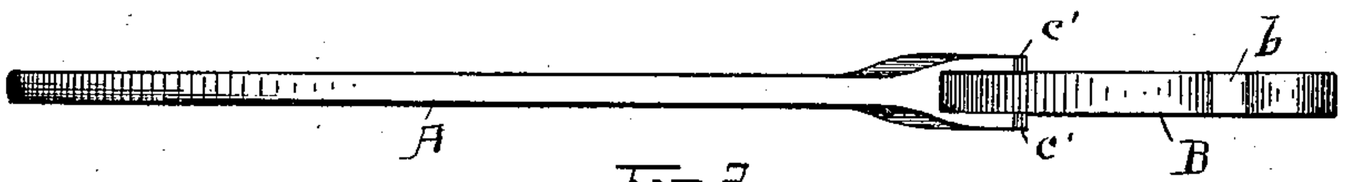

Fig 2

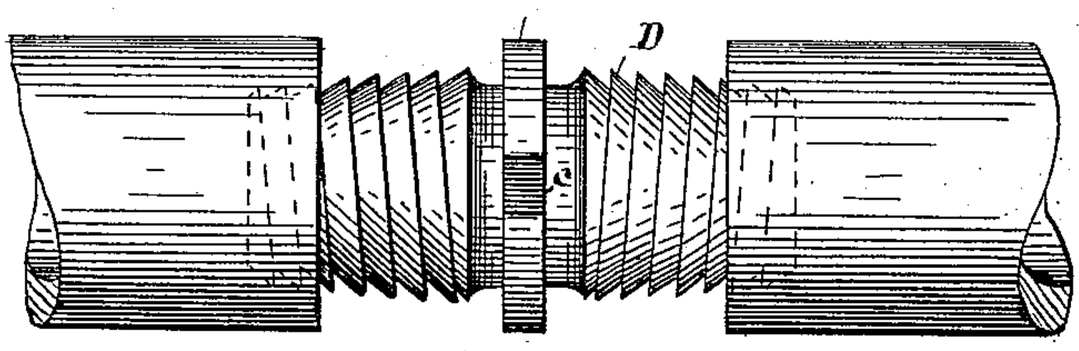

Fig 3

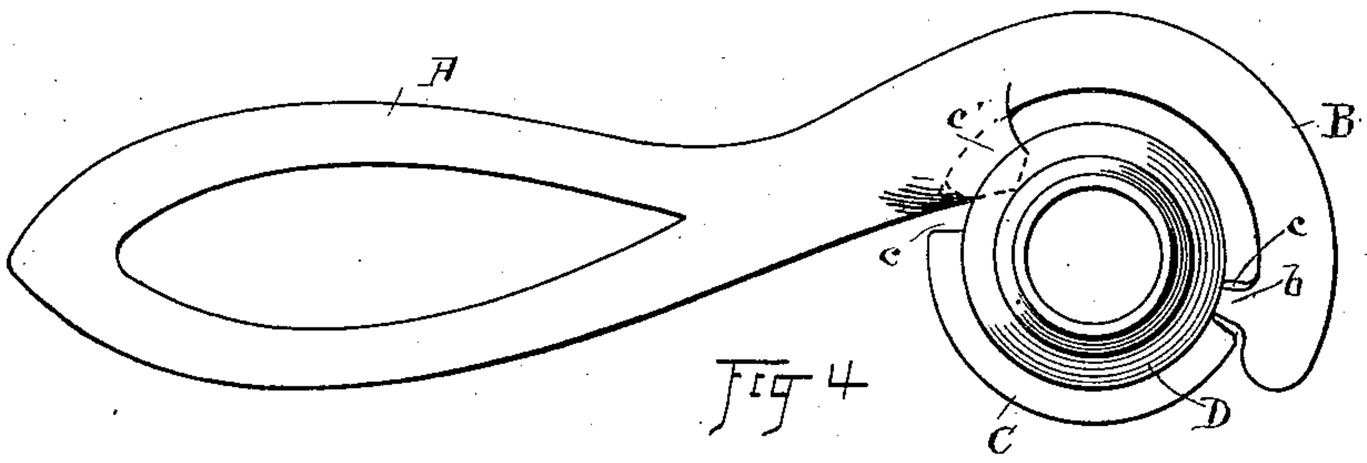

Fig 4

Attest.
R. B. Moser
N. L. McLaurin

Inventor.
Darius S Robinson.

By H. J. Fisher Attorney.

UNITED STATES PATENT OFFICE.

DARIUS S. ROBINSON, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO F. E. DRURY, OF SAME PLACE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 464,084, dated December 1, 1891.

Application filed August 31, 1891. Serial No. 404,264. (No model.)

To all whom it may concern:

Be it known that I, DARIUS S. ROBINSON, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in wrenches; and the invention consists in a wrench of a special construction designed for use with a novel construction of hose-coupling, likewise invented by me, and illustrated in the accompanying drawings more especially to show the use to which the said wrench is applied.

It will be understood that lawn-hose in time develop weak points, caused by twisting, short bending, or other like strains, and that they spring leaks at these points which it is desirable to mend. Threaded couplings of the general nature of the one shown herewith have been used for connecting the ends of hose formed by cutting out the breaks or leaky portions just described; but such couplings have not been convenient to attach, for two reasons: first, because of defective construction of the couplings themselves, and, secondly, for the want of suitable means to bring the hose and coupling together so as to prevent leakage and to make a durable and satisfactory joint. I have sought to remedy both of these objections by my invention; and the invention covered in this case consists in a wrench to turn the coupling, said wrench being constructed and operating substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved wrench, and Fig. 2 is an edge view thereof, looking down on Fig. 1. Fig. 3 shows a side elevation of the coupling referred to, with sections of hose partly attached; and Fig. 4 shows the relation of the wrench to the coupling when it is used.

The wrench, as shown, consists of a handle A and a curved jaw B, formed in a single piece. The jaw B is designed to engage a circular object—as, for example, the central flange C of the coupling D. This flange, however, necessarily is a narrow one in cross-section, and when the said coupling is turned the hose runs up on both sides nearly or quite against the same and a smooth and even union is thereby made. It will be noticed that the threads on the coupling run reversely from the flange C, so that when said coupling is turned in one direction it will screw into both hose-sections, and when turned in the opposite direction it will release said sections. It will also be observed that the said flange C has two notches *c* on opposite sides, and it may have one or more such notches, as shall be found convenient.

The jaw B of the wrench has the same size laterally, or substantially the same size, as the flange C, and near its point has an inwardly-projecting tooth *b*, adapted to engage in the notch *c* in the said flange. This construction enables the wrench to rest on the said flange and to be turned thereon in tightening up the coupling, and at the same time, by reason of being no wider than the flange, to avoid contact or touch with the hose at either side. Then in order that the wrench may be held on the said flange when it is released from the notch therein and carried around to take a fresh grip, I provide lips *c'* at the shank of the wrench, which are adapted to ride at the sides of said flange and serve as guides and lateral supports when the wrench is turned. The curvature of the inner edge of the jaw B extends through between these lips and terminates above the same. These lips are light and thin, so that they serve every purpose of guides, and yet do not prevent the hose from coming up close to the flange C.

This wrench is preferably supplied to the market with a certain number of the couplings—say half a dozen—all put up in a single package and sold together; but either may of course be bought separately.

The advantage of the lip *c'* at the shank of the wrench is especially observable when the wrench is used and one hand grasps the hose and the other the wrench. The flange on the coupling being very narrow, it is next to impossible to get a bearing of the wrench upon it when it is made so narrow, as in this case, without aid of the side lips.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A wrench having a narrow curved jaw and a tooth on the inside of the jaw, substantially as described.

2. A wrench having a handle and a curved jaw formed in one piece, and an engaging tooth on the jaw and guides on the shank, substantially as described.

3. The wrench herein described, the same consisting in a handle and a curved jaw formed in one piece, said jaw having an inwardly-projecting tooth at or near its extremity, and guiding-ears on the sides of the shank, substantially as described.

Witness my hand to the foregoing specification this 22d day of August, 1891.

DARIUS S. ROBINSON.

Witnesses:

H. T. FISHER,

NELLIE L. MCLANE.