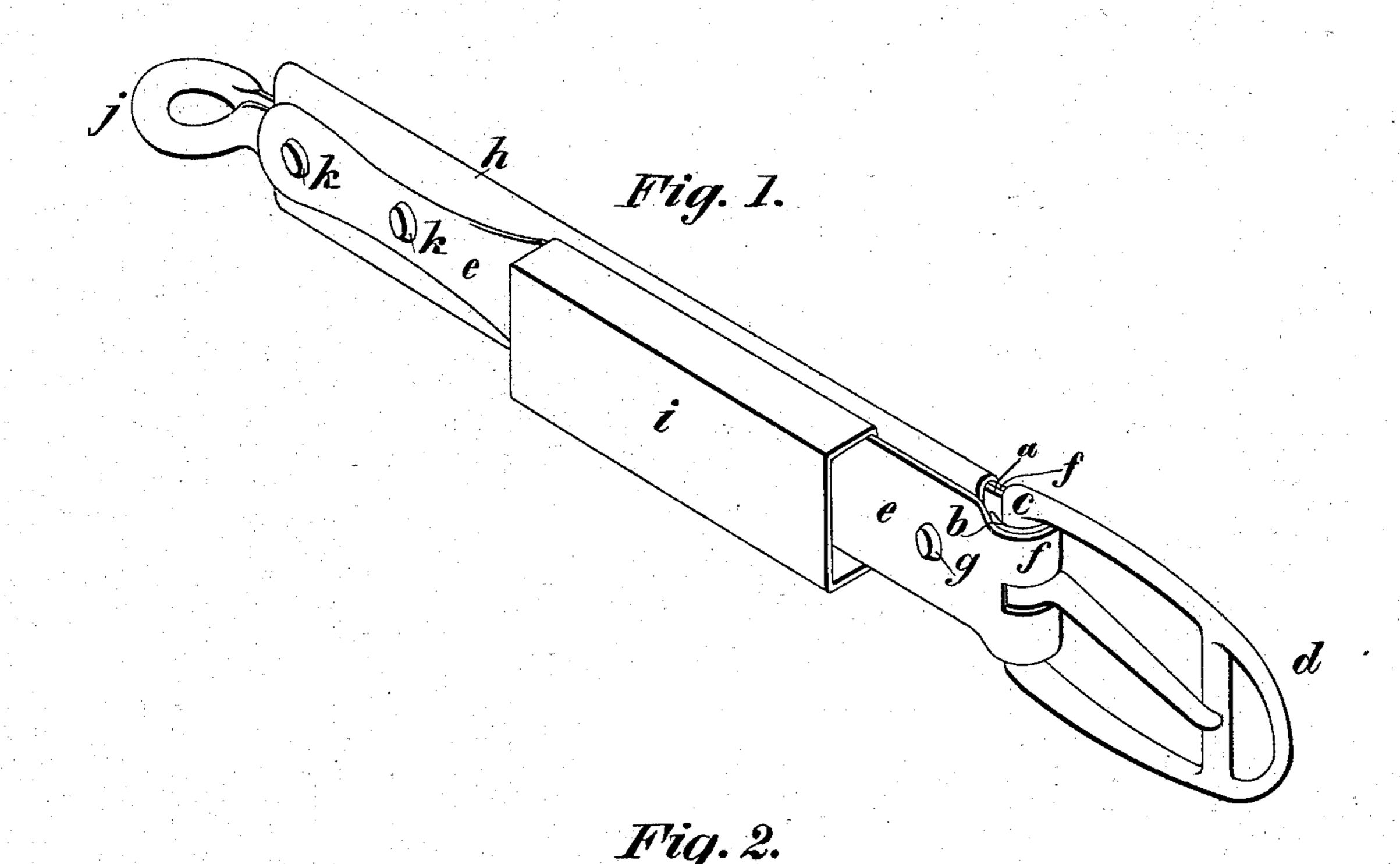
(No Model.)

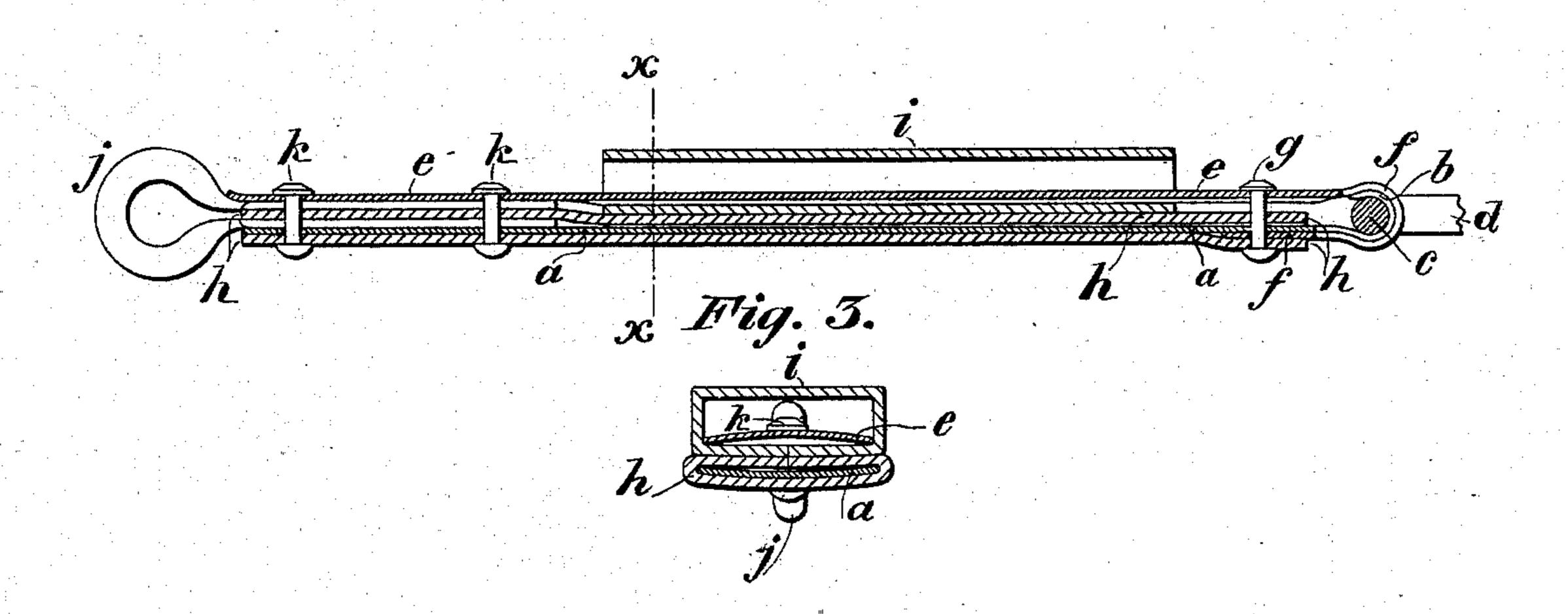
E. P. WATERS.

HAME TUG.

No. 278,475.

Patented May 29, 1883.





WITNESSES: Dohne Hotteemer bedgwick

INVENTOR:

& Waters

BY Municipal ATTORNEYS.

United States Patent Office.

EDWARD P. WATERS, OF ROSEVILLE, ILLINOIS.

HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 278,475, dated May 29, 1883.

Application filed March 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. WATERS, of Roseville, in the county of Warren and State of Illinois, have invented a new and Improved 5 Hame-Tug, of which the following is a full,

clear, and exact description.

My invention relates to improvements in hame-tugs; and it consists of two plates having their ends bent around the cross-bar of 10 the buckle—one outside of and overlapping the other—and riveted together for holding the hame clip or eye and the trace-keepers, whereby the tug is made strong and practical with less labor and cost than heretofore.

The invention also consists of the use of a leather sheath for the inner plate, and of making the plates concave upon their inner faces, whereby the sheath and trace-keeper may be securely held between the plates when the

20 plates are riveted together.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate cor-

responding parts in all the figures.

Figure 1 is a perspective view of my new and improved hame-tug. Fig. 2 is a longitudinal sectional elevation of the same, and Fig. 3 is a transverse sectional elevation taken on the line x x of Fig. 2.

a represents the inner metal plate, which is rolled at its rear end, as shown at b, for holding the cross-piece c of the trace buckle or holder d; and e represents the outer metal plate, which is folded outward and forward at its 35 rear end, as shown at f, for inclosing the crosspiece c of the buckle, and also the roll b of the plate a, and this fold f is of such length that it laps down upon the inner plate, a, a sufficient distance to permit the passage of the 40 rivet g through it, as clearly shown in Fig. 2. The inner plate, a, is covered by the leather sheathing h, and upon the outer plate, e, is placed the keeper i for holding the forward 45 through the trace-buckle d. The hame $\operatorname{clip} \mid i$, and rivets $g \mid k$, substantially as and for the or eye j is attached and held to the hame-tug by the rivets k k, which also clasp the forward ends of the plates a e together, as will be understood from Fig. 2. The plates a e are, by

preference, made concaved upon their inner 50 faces, so that when drawn together by heading the rivets g k the sheath h and the keeper iwill be grasped between the edges of the two plates and firmly held, as will be understood from Fig. 3. Constructed in this manner, it 55 will be seen that all sewing in making the hame-tug is avoided, except that required in forming the keeper i and the sheath h, and that therefore all ripping and loosening of the traceloops are avoided. It will also be seen that 60 the hame clip or eye and the trace buckle are held with great strength by the plates a e and rivets k g, and that they cannot break or tear out, as the ordinary hame-tug is liable to do. Furthermore, the best of leather need not be 65 used with my improved hame-tug, as is required by the ordinary construction, in order to make a good hame-tug, and when finished the tug presents a nice appearance, is more compact, more easily repaired, and is stronger 70 and much cheaper than the ordinary form of hame-tug.

Instead of making the plates a e of two pieces, they may be made of a continuous plate, bent in the middle around the cross-piece of 75 the trace-buckle; but I prefer to make them of two pieces, as shown, as it permits them to be made thinner and of a uniform thickness throughout, and at the same time renders the connection with the trace-buckle more durable 80

and stronger.

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

1. In a hame-tug, the combination, with a 85 buckle, of the plate a, having its end b bent around the cross-bar of the buckle, and the plate e, having its end f bent around the crossbar outside of the end b and lapping upon the plate a, substantially as herein shown and de- 90 scribed.

2. The plate a, having the leather sheath h, end of the trace after having been passed in combination with the plate e, trace-keeper purposes set forth.

> 3. In a hame-tug, the plates a e, made concaved upon their inner faces, substantially as and for the purposes set forth.

4. The concaved plates a e, folded or rolled as shown at bf, in combination with the leather sheath h and the trace-keeper i, substantially

as and for the purposes set forth.

5 5. The hame-tug herein shown and described, consisting of the concaved plates a e, rolled or folded for holding the trace buckle or holder d, in combination with the sheath

h, trace-keeper i, and hame clip or eye j, the parts being held together by suitable rivets, 10 substantially as and for the purposes set forth.

EDWARD P. WATERS.

Witnesses:

CHARLES A. ANDERSON, SYLVESTER B. WELCH.