

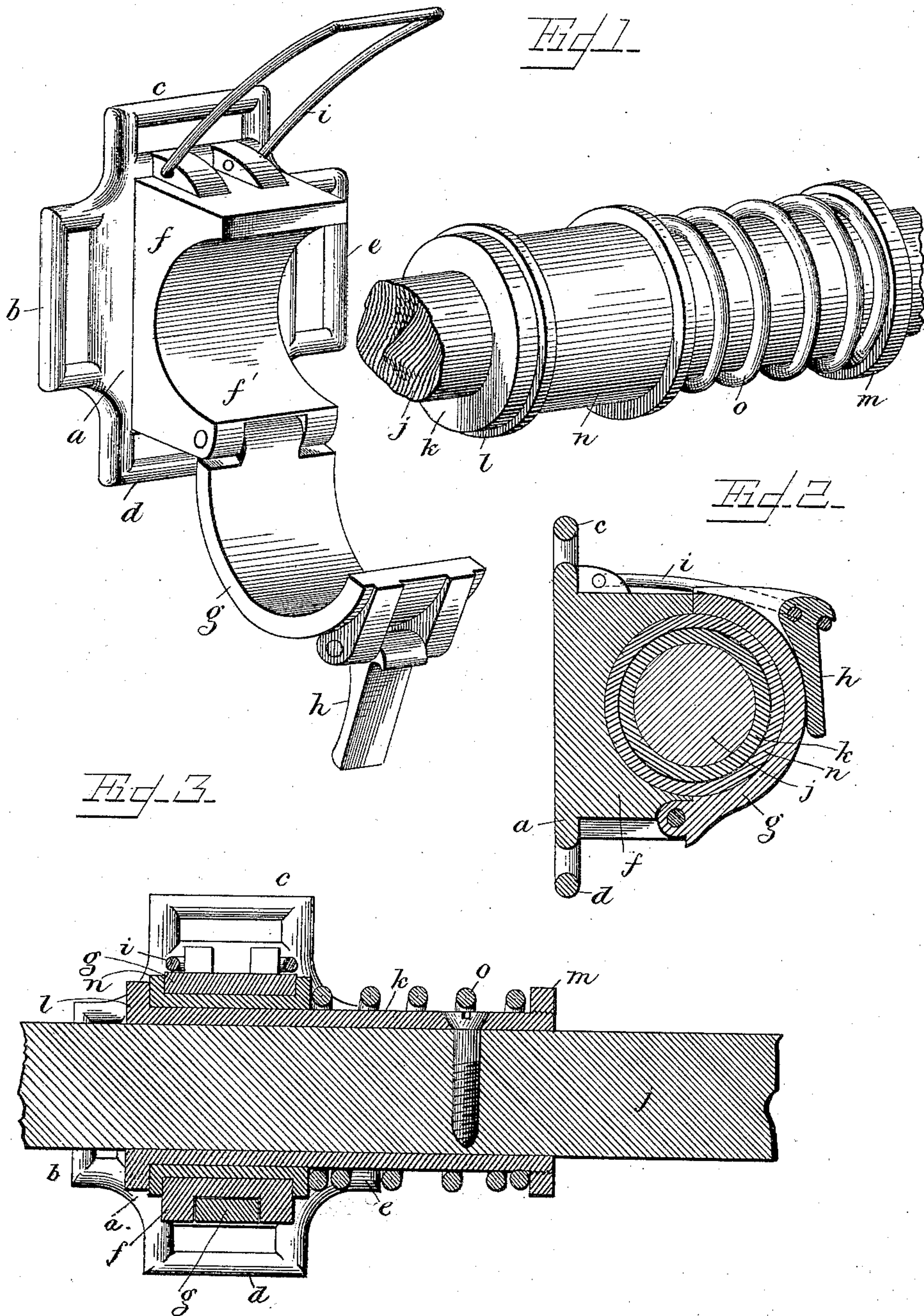
(No Model.)

M. W. ROHRER, Jr. & D. H. BOYER.

TUG.

No. 330,426.

Patented Nov. 17, 1885.



WITNESSES

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UNITED STATES PATENT OFFICE.

MICHAEL W. ROHRER, JR., AND DAYTON H. BOYER, OF DILLER, NEBRASKA,
ASSIGNORS OF ONE-THIRD TO WILLIAM W. ROHRER, OF CRESTON, OHIO.

TUG.

SPECIFICATION forming part of Letters Patent No. 330,426, dated November 17, 1885.

Application filed April 1, 1885. Serial No. 160,889. (No model.)

To all whom it may concern:

Be it known that we, MICHAEL W. ROHRER, Jr., and DAYTON H. BOYER, citizens of the United States, residing at Diller, in the county of Jefferson and State of Nebraska, have invented certain new and useful Improvements in Tugs, of which the following is a full, clear, and exact description.

The object of this invention is to provide a tug which may be engaged with the thills like a clasp without threading the thills through the same, and which will take up the jar of jerking of an animal or of a wheel against a stone or other obstruction.

Our invention consists in a two-part tug, one member being in the nature of a clasp engaging the saddle, breast, or hame-strap, girth, and breeching, and the other being a spring-fixture on the thills, with which the clasp is engaged to harness the animal to the thills, as we will now proceed to set forth and claim.

In the accompanying drawings illustrating our invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view of the parts detached. Fig. 2 is a vertical cross-section through the center of the clasp, and Fig. 3 is a longitudinal section of the parts in position.

a is a base of metal, having the hame or breast-strap loop *b*, saddle or back-strap loop *c*, girth-loop *d*, and breeching-strap loop *e*, and designed to be held in position in the harness by said straps. This base is provided with a projection, *f*, having a semicircular cavity, *f'*, in it, and to the lower end of said projection is hinged a semicircular member, *g*, which, when closed over the projection *f*, makes with its cavity a circular opening to receive the shaft portion of the tug. The member *g* has pivoted to it an eccentric hook-lever, *h*, which, when said member is closed down over the projection *f*, engages a bail, *i*, hinged to said projection, to draw and thus lock the two parts together. Any other suitable well-known locking device may, however, be substituted for this. The parts *a* to *i* constitute what we have hereinbefore referred to as a "clasp."

Upon the shafts or thills *j*, at the points where they are usually engaged by the tugs,

we place a close-fitting metallic sleeve, *k*, and secure the same by a screw or other fastening, as indicated in Fig. 3. This sleeve has a fixed annular flange, *l*, at one end, and a second flange, *m*, at the other end, the latter being detachably secured thereto by a screw-thread or otherwise. The sleeve is encircled by a collar or band, *n*, flanged at both ends, as shown, and of a width to receive the clasp, and this collar is normally held up to the flange *l* of the sleeve by a stout spiral or other spring, *o*, which engages the sleeve between said collar and the flange *m*. The flange *m* is made detachable to admit of the placing of the collar and spring on the sleeve. The collar fits the sleeve in such manner as to freely slip thereon. The engagement of the harness with the thills is effected by getting the animal within the shafts or thills and then locking the members *g* of the clasps about the collars *n*. A fractious animal may thus be harnessed to a vehicle with great ease without the annoyance of backing him into the shafts or pulling the vehicle up to him, so as to thread the thills through permanent eyes in tugs. So, also, in case of falling of the animal or other accident, he may be readily disconnected from the vehicle.

By connecting the breeching-strap to the tug we dispense with a holdback on the thills, and as such tug is always in correct position, we save the necessity of properly adjusting such straps to the thills. The spring serves to take the jar and jerk heretofore thrown on the vehicle by the animal jumping or the vehicle lurching on meeting an obstruction, such as a stone. It also adapts itself to the motion of the shoulders of the draft-animal, and so gives the same movement as a whiffletree.

Either collar or breast single harness may be supplied with our tug, and it will be found that the cost of the same is considerably reduced over the old style.

What we claim is—

1. A tug-attaching device comprising a clasp secured to the harness, a sleeve fast to the thill, a collar movable on said sleeve and engaged by the clasp, and a spring acting against said collar, substantially as described.

2. A clasp provided with loops to engage

the saddle or back-strap of a harness, the breast or hame strap, and the girth, and to receive the breeching-strap, combined with a movable collar secured in a fixed position on
5 the thill, substantially as described.

3. A thill-tug, a clasp provided with a base having loops for engaging the harness, a projection having a semicircular cavity, a semicircular member hinged to said projection and
10 adapted to complete the circle of its cavity, and a locking device to secure said member in such position, combined with a sleeve on the thill and a movable or yielding collar on said sleeve, substantially as described.

15 4. In a tug-attaching device, a sleeve af-

fixed to the thill and provided with end flanges, a flanged collar encircling such sleeve, and a spring acting against the foremost flange of said sleeve, combined with a clasp adapted to be attached to the harness to engage said
20 collar and be readily disengaged therefrom, substantially as described.

In testimony whereof we have hereunto set our hands this 25th day of March, A. D. 1885.

MICHAEL W. ROHRER, JR.
DAYTON H. BOYER.

Witnesses:

A. D. LUCAS,
A. L. FIRSTMAN.