

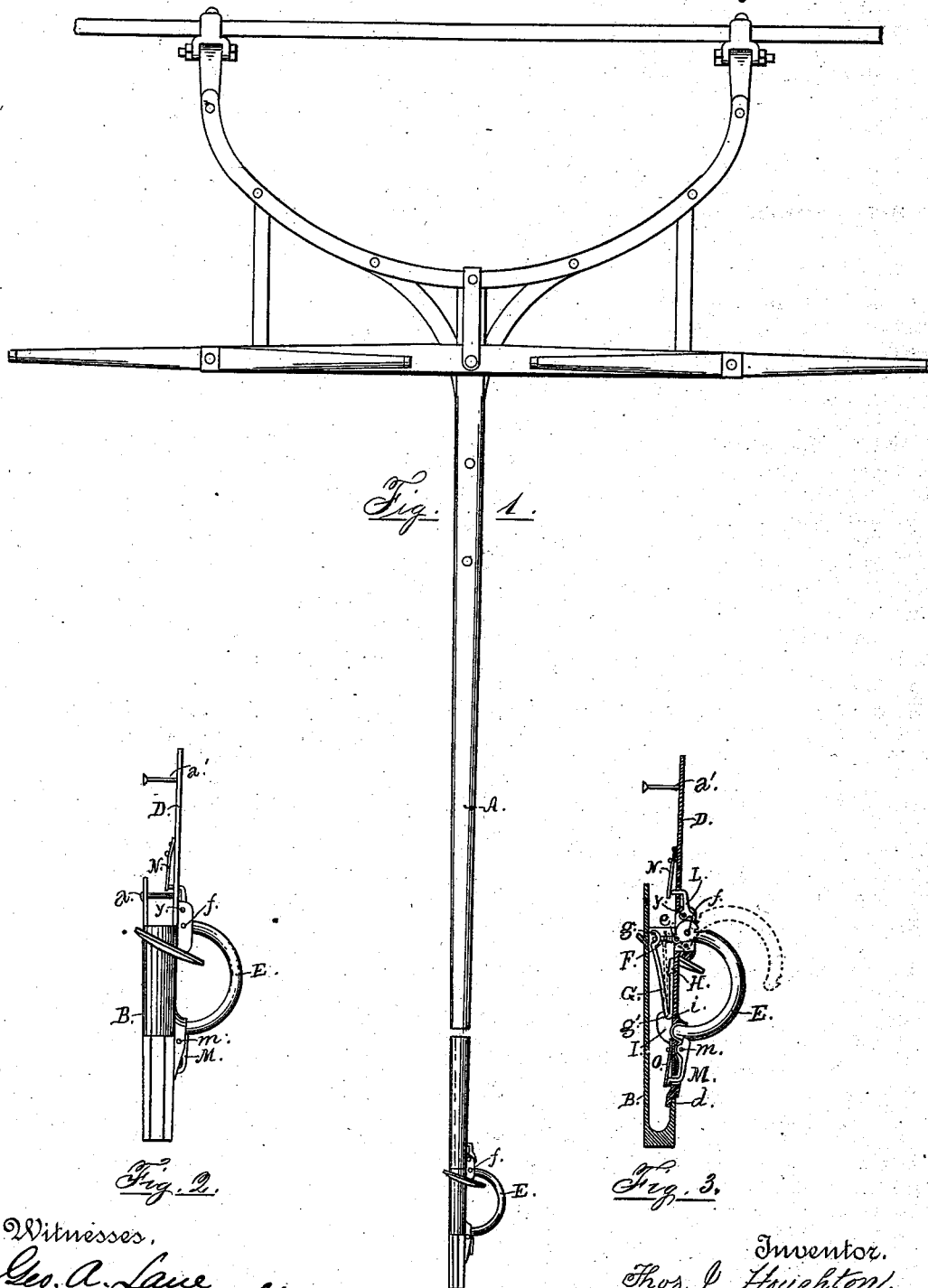
(No Model.)

T. J. HOUGHTON.

POLE TIP.

No. 382,529.

Patented May 8, 1888.



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UNITED STATES PATENT OFFICE.

THOMAS J. HOUGHTON, OF LANCASTER, PENNSYLVANIA.

POLE-TIP.

SPECIFICATION forming part of Letters Patent No. 382,529, dated May 8, 1888.

Application filed October 5, 1887. Serial No. 251,521. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. HOUGHTON, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Hitching Devices for Vehicles, of which the following is a specification.

This invention relates to tips for the poles of vehicles to which two horses are attached, and is an improvement upon the construction and application of an invention for which I obtained Letters Patent No. 357,600, dated February 15, 1887; and the objects of my improvements are, first, to secure the clasp more firmly in place when closed than was previously done, and, second, to adapt the clasp with its attendant mechanism to be used on the ends of the poles of two-horse vehicles. I accomplish this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a pole with my improved tip attached thereto, the end carrying the tip being shown in side view; Fig. 2, an enlarged side view of the tip; and Fig. 3, a side view of the tip, with a portion of the shell removed to show the operating mechanism.

Similar letters indicate like parts throughout the several views.

The pole-tip is formed of two sections connected by the bolt *a*, securing the tip to the pole. The first section, B, is in shape and appearance similar to the tips generally used, but somewhat longer, and has a longitudinal slot in its under side, which receives the second section—a plate, D, to which is attached the operating mechanism. This second section extends back some distance farther than section B, and is secured to the pole A by an additional bolt, *a'*. The front end also interlocks with section B by means of a forwardly-projecting lip, *d*, which engages the inner surface of said section B.

The mechanism by which the yoke-collar is secured is substantially the same as that described in my patent before mentioned, and is constructed as follows:

A clasp, E, has one end pivoted in a slot in the plate D at *f*, the end *e* of the same being

connected with the vibrating end *g* of a spring, G, seated on the inner face of the plate by a link, F. The spring is U shaped, one arm, *g'*, resting on the plate and having a recess cut into its outer end, which bears against a correspondingly-shaped bearing-plate, H, fastened on the face of the plate, the other being free and actuating the clasp E to close when open. The bend of the spring rests in a recess, *i*, in the side of the lug I, fastened to the plate D. When opened, the clasp is so held by means of a trigger, L, pivoted in the slot at *y*, immediately back of the rear end of the clasp E, and is actuated by the spring N. The front end of the trigger is formed with a hooked catch adapted to engage with a notch formed in the base of a lug on the rear end of the clasp E. As previously constructed, the front end, *e'*, of the clasp rested against the plate in a collar, K, secured to the plate D. This was found not to be sufficiently secure, as under certain stress the forward end of the clasp was liable to be forced open, notwithstanding the spring G. This defect I have remedied by using another trigger, M, which is pivoted in front of the clasp at *m*, and acts, by virtue of the spring O, to keep the clasp closed in the same manner in which the trigger L serves to hold it open.

In order to save the clasp, and at the same time to afford a better backward bearing to the collar of the yoke, there is a flange, P, formed integral with the tip and located within the clasp, but divided into sections in the same way as is the tip, one section of the flange being formed on section B and the other on section D.

The use of my invention herein described prevents the accidental separation of the yoke from the pole and the numerous accidents incidental thereto.

The construction of the tip in two sections permits the connection therewith of the clasp and its actuating mechanism, which would otherwise be almost impossible.

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

1. In a hitching device for vehicles, the combination, with the pole-tip divided into sec-

tions, of the clasp E, spring G, triggers L and M, and springs N and O, constructed to operate substantially as described.

2. The combination, in a pole-tip, with the
5 clasp, and a spring connected with and acting to close the same, of two triggers, one engaging with the clasp to keep it open and the

other to keep it closed, and springs to force the triggers into such engagement, for the purpose specified.

THOMAS J. HOUGHTON.

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