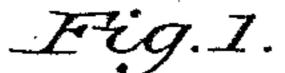
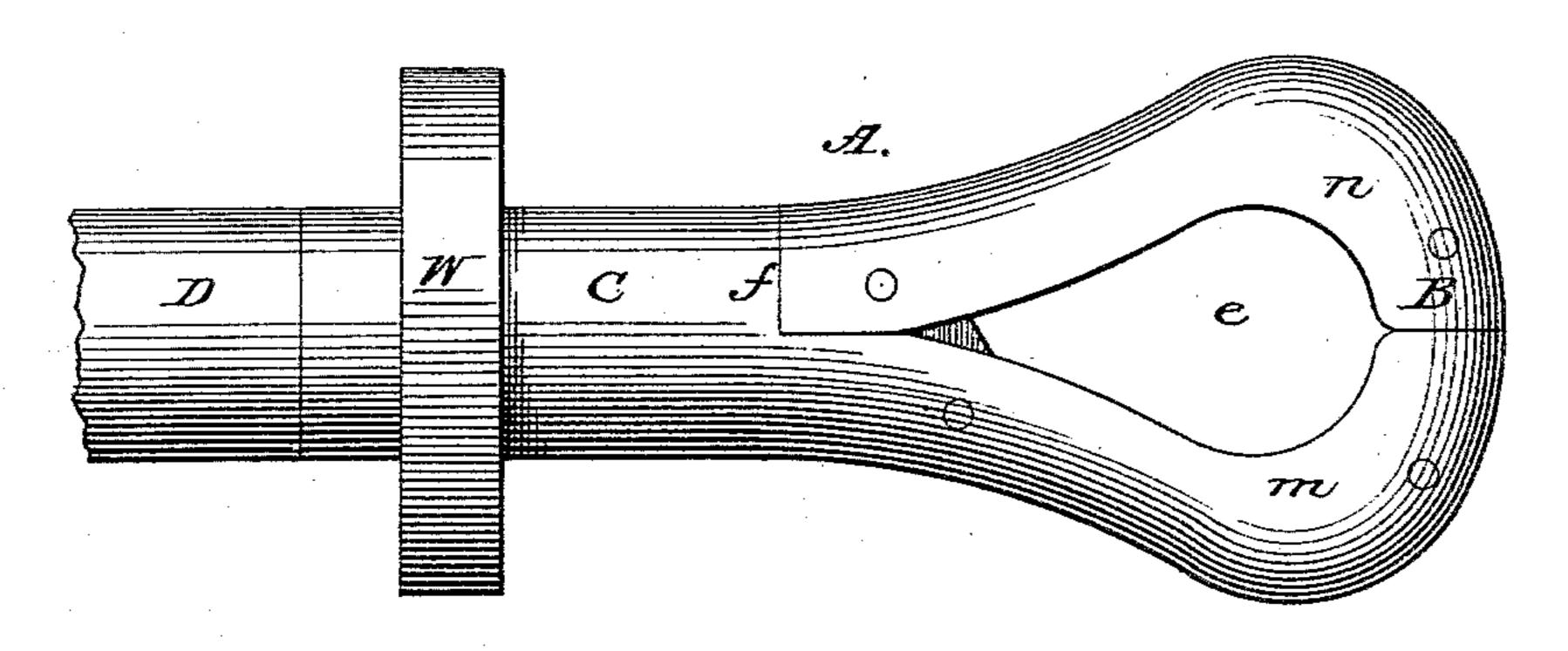
(No Model.)

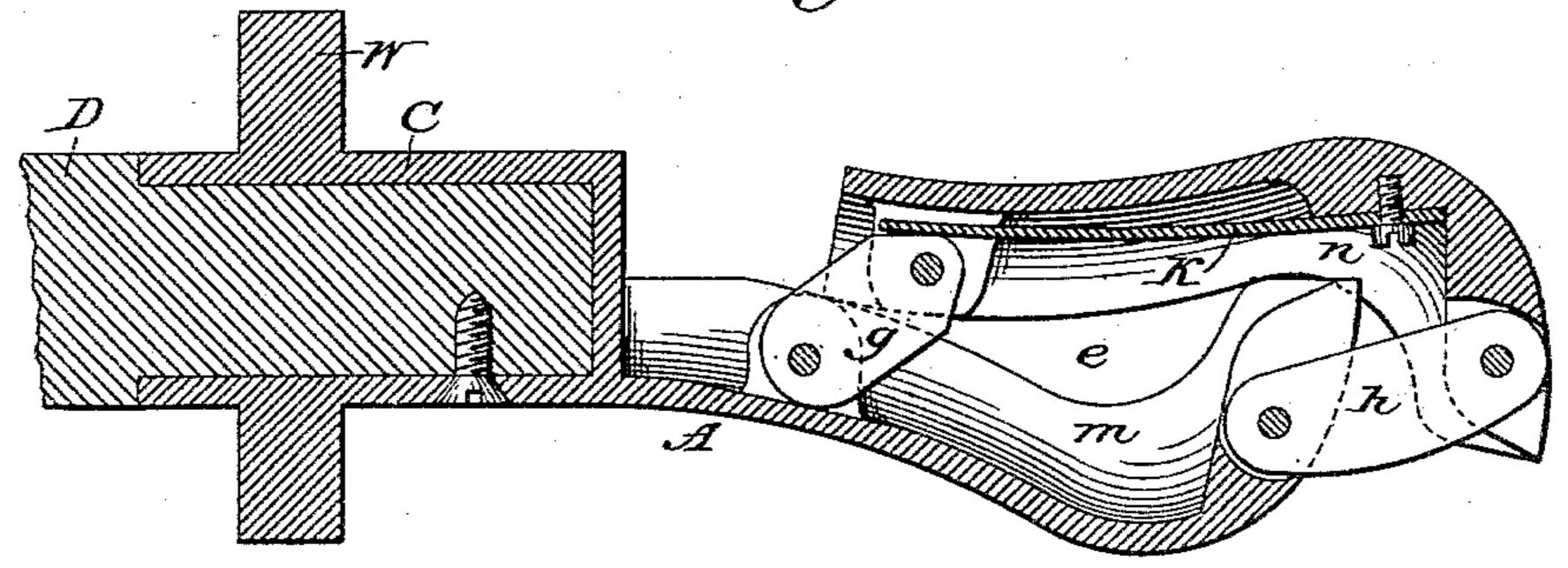
## F. A. ALDRICH. VEHICLE POLE TIP.

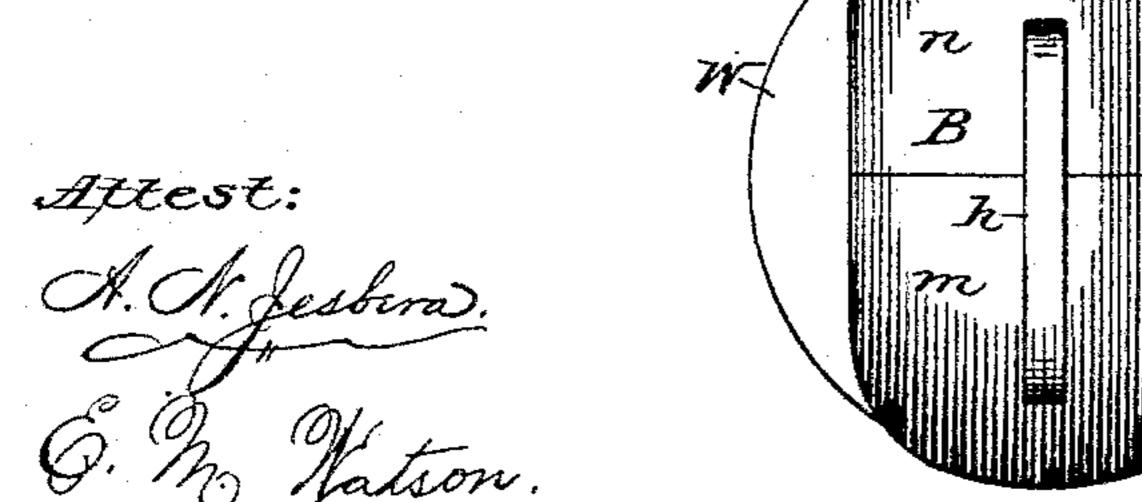
No. 387,754.

Patented Aug. 14, 1888.









Inventor:

Frank A. Aldrich.
By David ansur.
Teta.

## United States Patent Office.

FRANK. A. ALDRICH, OF WINCHENDON, MASSACHUSETTS.

## VEHICLE-POLE TIP.

SPECIFICATION forming part of Letters Patent No. 387,754, dated August 14, 1888,

Application filed January 12, 1888. Serial No. 260,554. (No model.)

To all whom it may concern:

Be it known that I, FRANK. A. ALDRICH, of Winchendon, in the county of Worcester and Commonwealth of Massachusetts, have in-5 vented certain new and useful Improvements in Tips for the Thills or Poles of Wagons or Sleighs; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying draw-10 ings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a side elevation of my improved tip as applied to a wagon or sleigh pole; Fig. 15 2, a central longitudinal section thereof, illustrating the tip when opened out to reduce its diameter and permit of the slipping of the neck-yoke ring or lug-strap over it; Fig. 3, a front end view of the device in elevation.

The object of my invention is to prevent the too frequent injuries to man and beast which occur with the ordinary forms of tips for thills or poles by reason of accidental contacts with their comparatively-sharp ends, and to over-25 come, likewise, the objections to the use of rubber or other elastic tips which have been

invented to prevent such injuries.

It consists in arming the end of the thill or pole with a light metallic shell provided at 30 one end with a socket to fit upon the thill or pole, and by which it may be secured thereto, and terminating at the other in an enlarged rounded head of such form and dimensions that when it is brought into contact with an 35 object it will glance off therefrom without penetrating it, and which is divided longitudinally into two sections, one of which is fixed and the other hinged thereto, so as to admit of being swung forward to drop thereon, and 40 thereby reduce the diameter of the head sufficiently to allow a holdback or neck-yoke ring or lug-strap of comparatively small diameter to be slipped over its end.

In the accompanying drawings, A repre-45 sents the metallic shell constituting my improved tip. This shell A is enlarged or widened at its outer or front end, so as to form a head, B, having an oblate or elliptical crosssection, the exterior face of this oblate end be-50 ing curved and rounded on all sides, as illustrated in Figs. 1 and 2. The major diameter of this oblate head is twice as great as the di-

ameter of the inner or rear end, C, of the shell, and this inner end is extended in a cylindrical or slightly-tapering form to serve as a socket 55 to receive and embrace the end of the thill or pole D to which the tip is to be secured.

The head B of the tip is preferably transversely perforated, as at e in Fig. 1, to increase

its lightness.

For use as a tip for thills the head may be formed in one piece of a single casting having the general form and proportions above described; but for use upon a wagon or sleigh pole in connection with a holdback-yoke, I 65 make provision for fitting the eye or ring of the yoke upon the tip and for keeping it from slipping back thereon by forming an annular flange or collar, W, to encircle the socket end C, and by dividing the head B longitudinally 70 into two sections, m n, both of which are centrally recessed on their inner sides to form the opening e between them when closed together. One of said sections, m, is made in one piece with the socket end C of the tip, and forms 75 therewith an offset or shoulder, f, and the other is hinged thereto by two links, g h, one of which, h, is pivoted in a slot in the front end of the fixed section m and in a corresponding slot in the front end of the movable section n, 80 and the other, g, is pivoted to the rear end of said movable section and to the fixed section m at a point, as shown in Fig. 2, which, when the movable section is swung longitudinally upon said links, will allow its rear end to abut 85 against and form a close joint with the offset or shoulder f formed on the tip. A flat spring, K, is fitted upon the inner side of the movable section n, and secured thereto at its front end to bear with its free end upon the pivoted link 90 h, so that as the link swings over, it shall operate to lift the spring, whose power is thus exerted to keep the movable section n depressed and hold it firmly both in its closed and in its open position. By swinging the 95 movable section forward, its front end is carried beyond the front end of the fixed section, and the recess on its inner side allows it to drop, so that the two ends will overlap each other, as shown in Fig. 2, thereby reducing 100 the diameter thereof in cross-section until it approaches closely that of the stem or socket end C of the tip, so as to permit the eye or ring of the neck-yoke to be readily passed over

the same. After passing the ring onto the tip the head is restored to its enlarged diameter by swinging back the movable section into place on the fixed section, as shown in Fig. 1, 5 and serves not only as a guard for the end of the pole, but also as a stop to prevent the yoke from slipping forward off of the pole.

The flange or collar W, against which the yoke strap or ring bears, may, if preferred, be to inclined, instead of being formed at a right angle with the length of the pole, as shown.

I claim as my invention—

1. The tip for the thills or poles of vehicles, consisting of a hollow metallic shell or casting formed with a socket at one end to receive the thill or pole and enlarged at its opposite end to form an oblate rounded head, said head being divided longitudinally into two sections, the one hinged or pivoted upon the other, whereby the diameter of the head may be re-

duced when required, substantially in the manner and for the purpose herein set forth.

2. The combination, in a tip for the thills or poles of vehicles, of the socket-piece C, the fixed head-section m, united to said socket- 25 piece, the movable head-section n, fitting upon the section m, to form therewith an enlarged head, B, the pivoted links g and h, by which the movable section is hinged to the fixed section, and the spring K, bearing upon the inner link, g, all substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two sub-

scribing witnesses.

FRANK. A. ALDRICH.

Witnesses:
FRANK B. SPALTER,
J. O. McCalley.