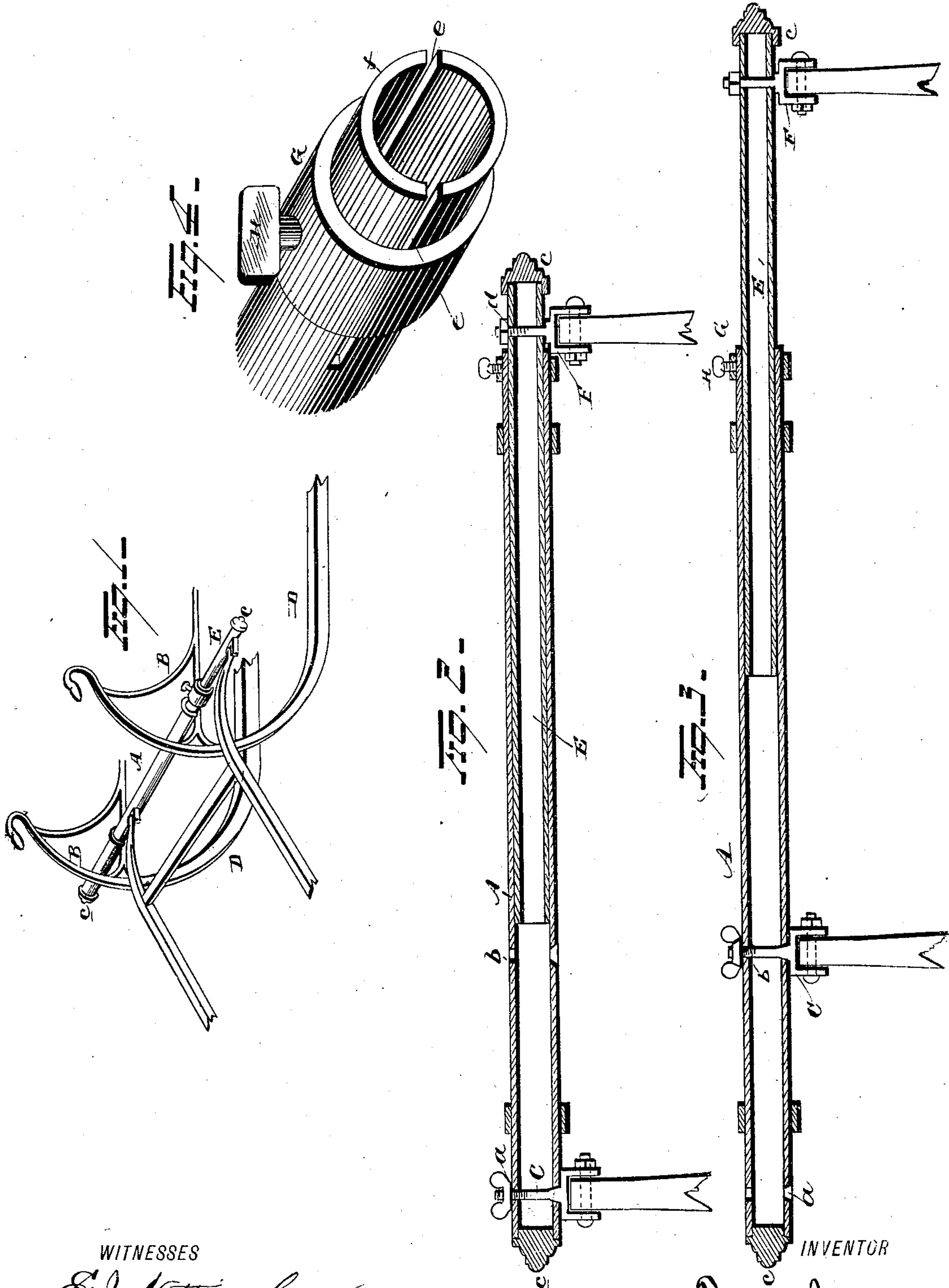


(No Model.)

F. JONES & W. WOOLSEY.
SHAFT ATTACHMENT FOR SLEIGHS.

No. 256,001.

Patented Apr. 4, 1882.



WITNESSES

E. J. Nottingham,
Herman Moran.

INVENTOR

Frank Jones
Wm. Woolsey
R. H. Symon, Attorney

UNITED STATES PATENT OFFICE.

FRANK JONES AND WARREN WOOLSEY, OF YPSILANTI, MICHIGAN.

SHAFT ATTACHMENT FOR SLEIGHS.

SPECIFICATION forming part of Letters Patent No. 256,001, dated April 4, 1882.

Application filed January 7, 1882. (No model.)

To all whom it may concern:

Be it known that we, FRANK JONES and WARREN WOOLSEY, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in the Manner of Attaching Shafts to Sleighs, &c.; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

Our invention relates to an improvement in the manner of attaching shafts to sleighs or other vehicles, the object of the same being to provide a cheap and durable adjustable connection adapted to enable the draft to be shifted from a central to a side draft, as desired; and with these ends in view our invention consists in certain details in construction and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view with our improvement secured to a sleigh. Fig. 2 is a longitudinal sectional view of the connection in position for central draft. Fig. 3 is a similar view, showing the manner of converting the central draft to a side draft; and Fig. 4 is an enlarged view, showing the manner of clamping the movable tube to the stationary tube.

A represents a hollow metallic tube adapted to be secured in any suitable manner to the sleigh B, and is provided near one end with the hole *a*, through which the shank of the thill-coupling C is adapted to pass when a central draft is required, and with the opening *b* nearer the center of the said tube, into which the thill-coupling C is secured when a side draft is required. This tube is adapted to project beyond the sides of the runners D, and the end of the tube A, preferably on the right side thereof, is stopped up with any suitable plug or cap, *e*, ornamented or otherwise, while the opposite or the end of the tube on the left-hand side of the sleigh is open for the reception of the sliding tube E. The tube E is of size sufficient to allow it to slide freely within the tube A and be held therein without wobbling, and can be of any desired length, and is provided near its outer end with the hole *d*, extending through the same, in which the thill-coupling F is secured when the sleigh or ve-

hicle is being operated by either a center or side draft. The outer end of this tube E is stopped by a suitable cap, *e*, adapted to be plain or ornamented, as desired.

The outer or open end of the tube A is provided centrally or otherwise with two or more slits, *c*, running in the direction of the length of the tube, by means of which the diameter of the said tube A can be restricted at this point so as to grasp or clamp the inner tube, E, throughout any portion of its length and hold it firmly therein.

For the purpose of the decreasing of the tube A at its outer slitted end it is provided with the surrounding collar G, loosely or removably secured thereon, as desired, and with the thumb-screw H, the lower end of which is adapted to bear on one of the sections *f*, formed by slitting the tube A. Thus it will be seen that when the thumb-screw H is tightened the sections *f* will be caused to approach each other and clamp the inner tube, E, firmly therein.

The thill-couplings C and F, as before stated, are removably secured to the telescopic tubes, and when it is desired to shift the draft it is not necessary to remove both thill-couplings from their positions, for by simply removing the thill-coupling C the inner tube can be slid in or out, as desired, with the other thill-coupling, F, and its connected shaft still in position, and hence it is only necessary to provide the screw-threaded shank of the thill-coupling F with an ordinary nut, *g*, while the shank of the opposite thill-coupling is provided with the thumb-nut *h*.

Now, supposing we have the shafts so secured to produce a central draft, as shown in Fig. 2, and we desire to adjust the parts to provide a side draft. To accomplish this it is only necessary to relieve the tube A of the pressure of the thumb-screw H, remove the thumb-nut *h*, withdraw the thill-coupling C from the opening in the tube A, and draw the inner tube outward until the shank of the thill-coupling C is opposite the hole *b*, when it is inserted therein and secured by the thumb-nut, and the two tubes A and E are again ready to be clamped together by means of the collar G and thumb-screw H. When necessary, this operation can be accomplished in a very few minutes without detaching or removing the horse from the shafts.

It is evident that slight changes in the construction of the different parts might be resorted to without departing from the spirit of our invention, and hence we would have it understood that we do not limit ourselves to the exact construction of parts shown and described, but consider ourselves at liberty to make such changes as come within the spirit and scope of our invention.

10 Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the outer tube, A, provided with a slitted end, and the tube E, adapted to slide within the tube A, of a collar adapted to surround the slitted end of the tube A, and a thumb-screw for decreasing the diameter of the said tube at this point.

2. The combination, with the tube A, secured

to the sleigh or vehicle in any suitable manner, 20 and provided with the openings or holes *a b* for the reception of a shank of a thill-coupling, and a slitted end, a collar surrounding the said slitted end, and a thumb-screw for decreasing the diameter of the said slitted end, of a 25 smaller tube, E, provided with the openings *d* for the reception of a shank of a thill-coupling, and adapted to slide within the tube A, substantially as set forth.

In testimony whereof we have signed this 30 specification in the presence of two subscribing witnesses.

FRANK JONES.
WARREN WOOLSEY.

Witnesses:

DARWIN C. GRIFFEN,
GEORGE PALMER.