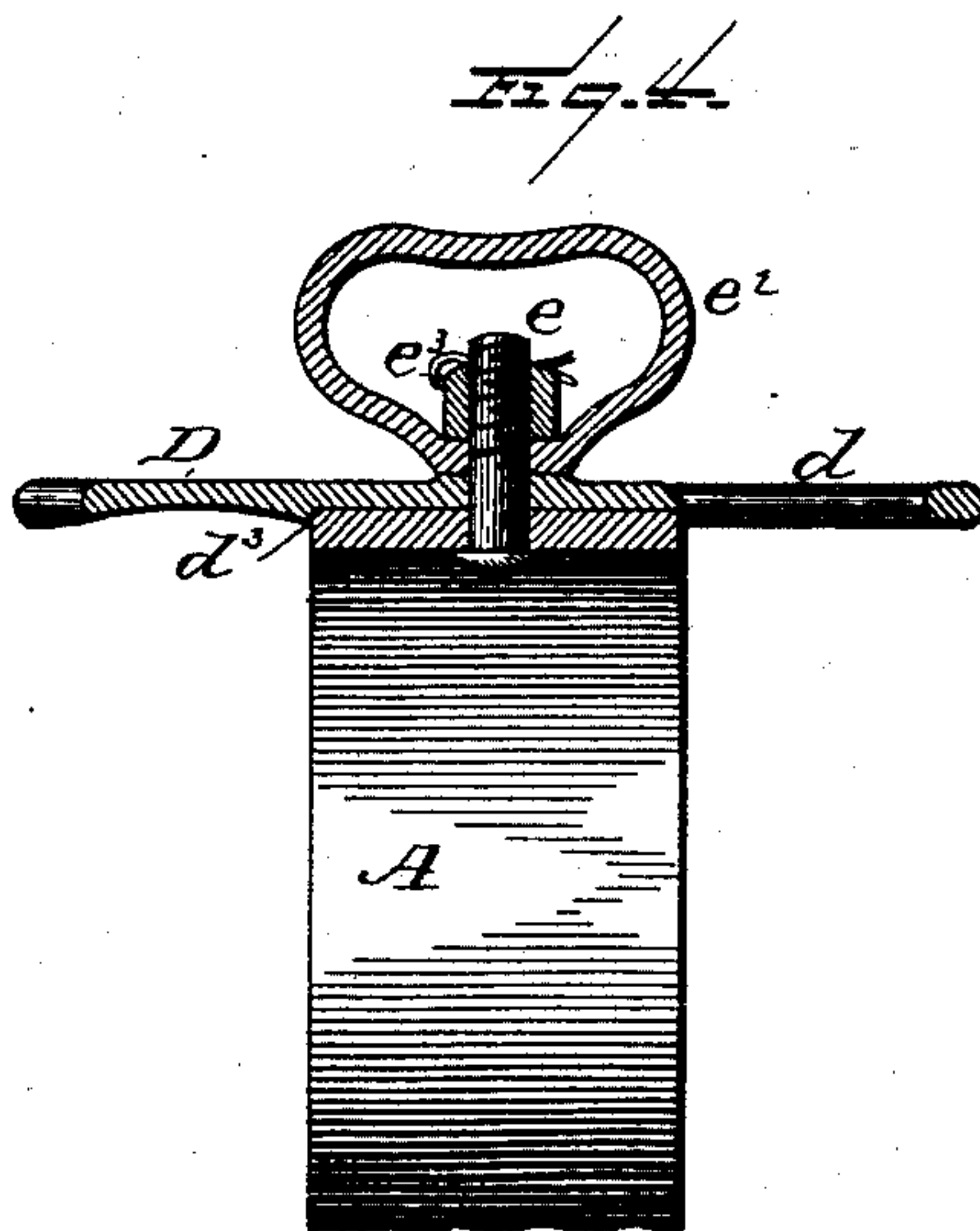
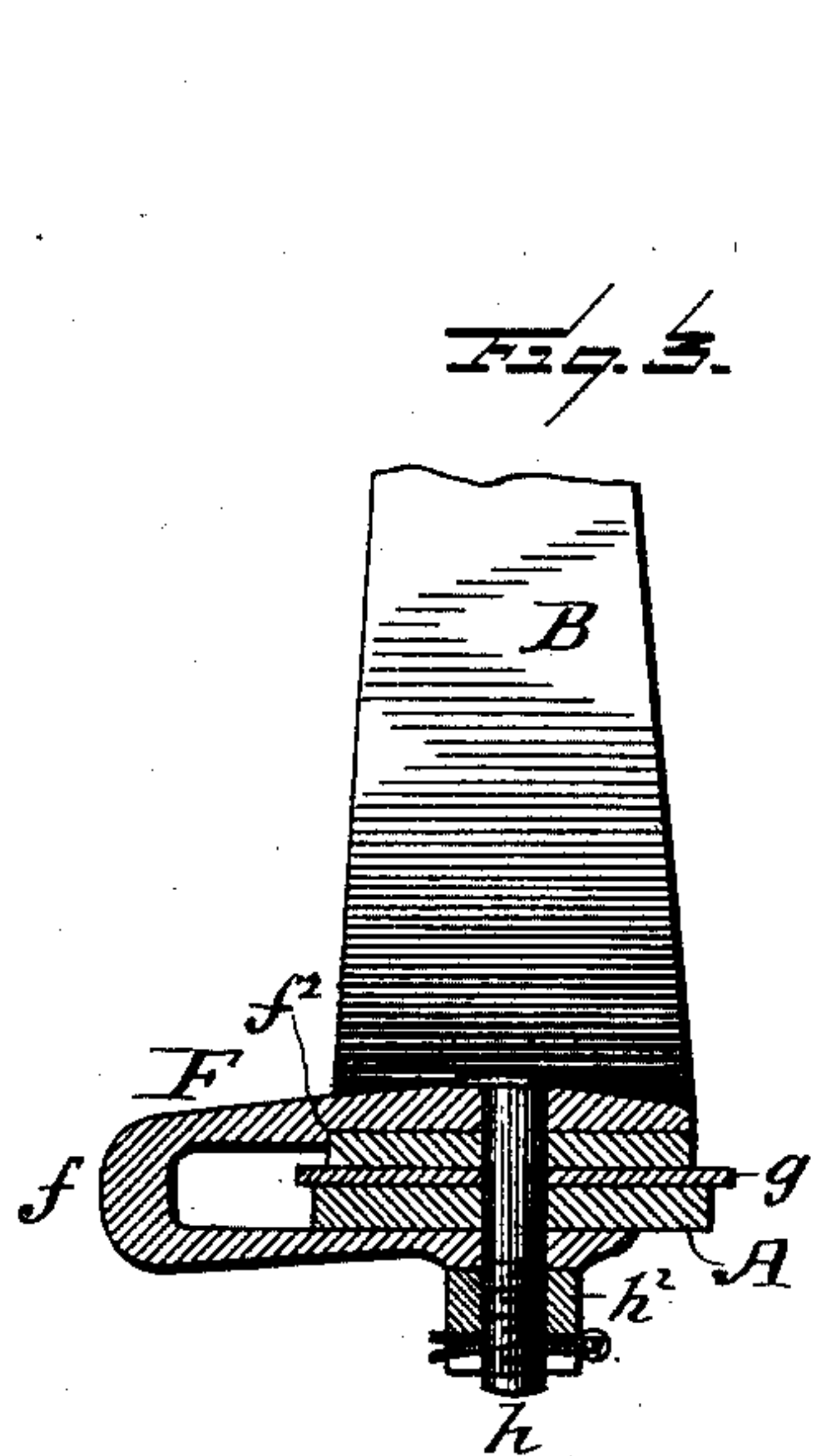
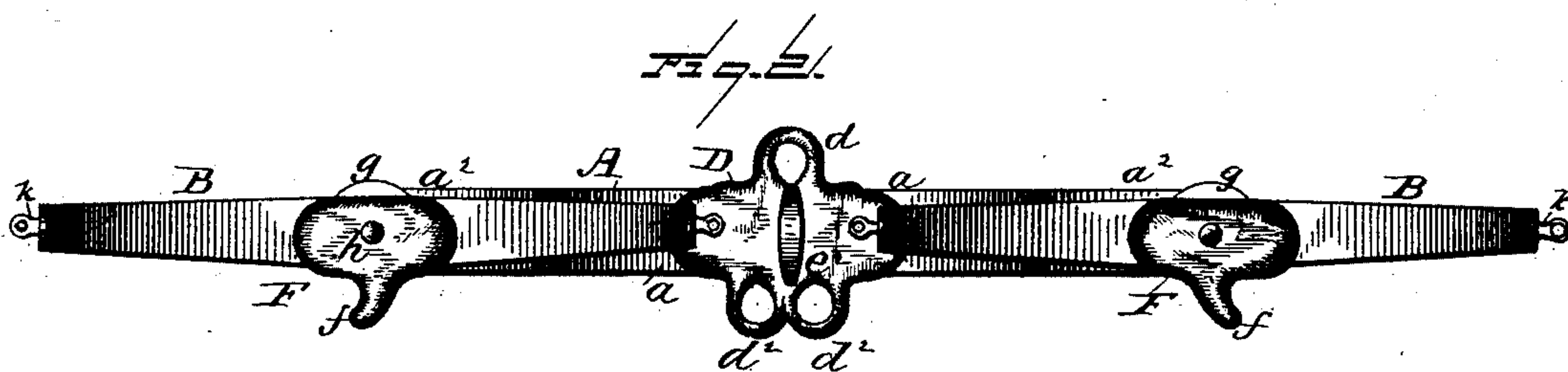
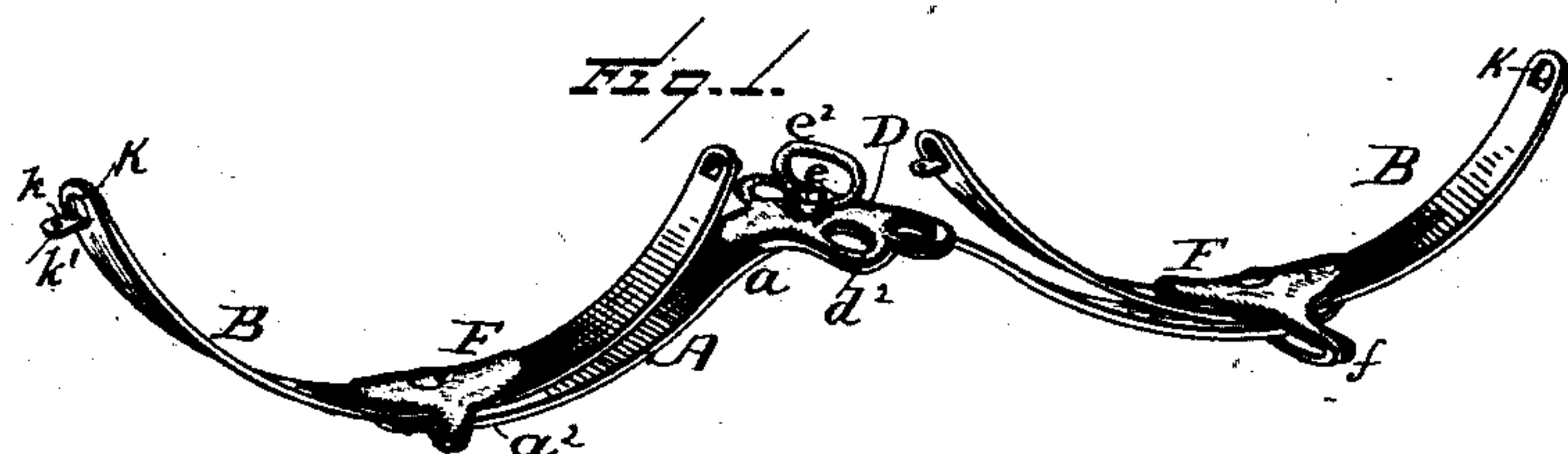


(No Model.)

A. SHERWOOD.  
HARNESS.

No. 374,430.

Patented Dec. 6, 1887.



Witnesses  
O. Hurdeman  
J. J. Masson

Inventor:  
Allen Sherwood,  
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att'y.

# UNITED STATES PATENT OFFICE.

ALLEN SHERWOOD, OF SYRACUSE, NEW YORK.

## HARNESSES.

SPECIFICATION forming part of Letters Patent No. 374,430, dated December 6, 1887.

Application filed April 27, 1887. Serial No. 236,337. (No model.)

*To all whom it may concern:*

Be it known that I, ALLEN SHERWOOD, a citizen of the United States, residing at Syracuse, in the county of Onondaga, State of New York, have invented certain new and useful Improvements in Harness, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of work-harness which employs a yoke supported beneath the horses and connected by short traces to the hames, and serving for the connection of the draft-chain between the horses, thereby dispensing with the use of ordinary traces, rendering the control of plows much easier, and obviating injury to shrubbery and trees by outside traces and projecting singletrees, providing a harness which is as well adapted for use in connection with wagons, sleighs, stone-boats, and drags, as well as other vehicles, implements, &c.; and my present invention is an improvement upon the harness for which Letters Patent were granted to me December 16, 1884, No. 309,317; and it consists in certain features of construction, hereinafter described and claimed.

Referring to the drawings, Figure 1 is a perspective view of a yoke constructed in accordance with my invention. Fig. 2 is a top view of the same. Fig. 3 is a transverse vertical section through one end of the yoke and through one of the segmental bands or singletrees and the clevis uniting them. Fig. 4 is a vertical section through the middle of the yoke, its draw-plate, and handle.

This device consists of the yoke proper, A, the central part of which is arched upwardly at *a*, so that when used in connection with the draft-pole of wagons, cultivators, reapers, and other implements it passes over the same, and the ends *a*<sup>2</sup> conform to the curvature of the singletrees B.

Upon the middle or top of the arch *a* of the yoke is secured a draw-plate, D, of novel construction. It has on one side a single eye, *d*, placed upon the transverse axis of said plate to receive one end of the draft-chain when the horses used are of equal size and strength, and on the opposite side the draw-plate has two eyes, *d*<sup>2</sup>, placed side by side, and either one of

said eyes is adapted to receive the draft-chain, so that if either horse is of unequal size or strength of the other the weaker can be given some advantage by shifting the draft-chain to the eye farthest from said horse without danger of the chain shifting out of its set position, as it occasionally happens with clevises having simply depressions on its inner surface. As either side of the yoke can be the front one relatively to the horses, both ends being alike, the draft-chain can be connected either with the central eye, *d*, or with either one of the side eyes. The draw-plate is secured to the yoke by means of a bolt, *e*, passing centrally therethrough, and to prevent said plate from turning upon said bolt it has flanges *d*<sup>3</sup> to bear against the edge of the yoke. Upon the bolt is also placed the handle *e*<sup>2</sup> and the nut *e*<sup>3</sup>, that securely unites these parts.

To permit the singletrees B to swing sufficiently upon their pivot without unduly enlarging the clevis uniting them to the ends of the yoke, the clevises F are used. They are made right and left (in pairs) and are secured to the singletrees so that their doubled-over middle portion, *f*, is bent or deflected outwardly or toward the outer end of each singletree of a pair. To cause the clevises F to revolve or oscillate with the singletrees, they have one edge flanged or bent down at *f*<sup>2</sup> against the edge of said singletrees. To facilitate the rotation of the singletrees upon the ends of the yoke, a washer, *g*, is placed between them and a bolt, *h*, unites them, a nut, *h*<sup>2</sup>, being screwed upon said bolt. To connect the singletrees with the supporting back-strap and with the short traces, an eye, K, is formed in each end of said singletrees by cutting the metal of said singletrees and separating it therefrom on three sides of said eye, but leaving the bottom portion uncut and bending it outwardly at that point to form a tongue, *k*, of sufficient size and strength for the trace-links to engage with, and the tongue has a perforation, *k*<sup>1</sup>, to receive a pin or a split key in front of the links.

Having now fully described my invention, I claim—

1. The combination of a metal yoke bent upwardly in the middle of its length and a



draw-plate upon said yoke, having one eye upon one side and a pair of eyes upon the opposite side, with a bolt uniting said draw-plate to the yoke, substantially as described.

- 5 2. The combination of a yoke upwardly bent in the middle of its length, a flat metal singletree having its ends upwardly bent, and a clevis having its doubled-over middle portion deflected outwardly toward the outer end

of the singletree, and a bolt uniting said parts, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALLEN SHERWOOD.

Witnesses:

L. M. PEDLEY,  
A. G. TIMMONS.