

(No Model.)

A. SHERWOOD.

HARNESS.

No. 309,317.

Patented Dec. 16, 1884.

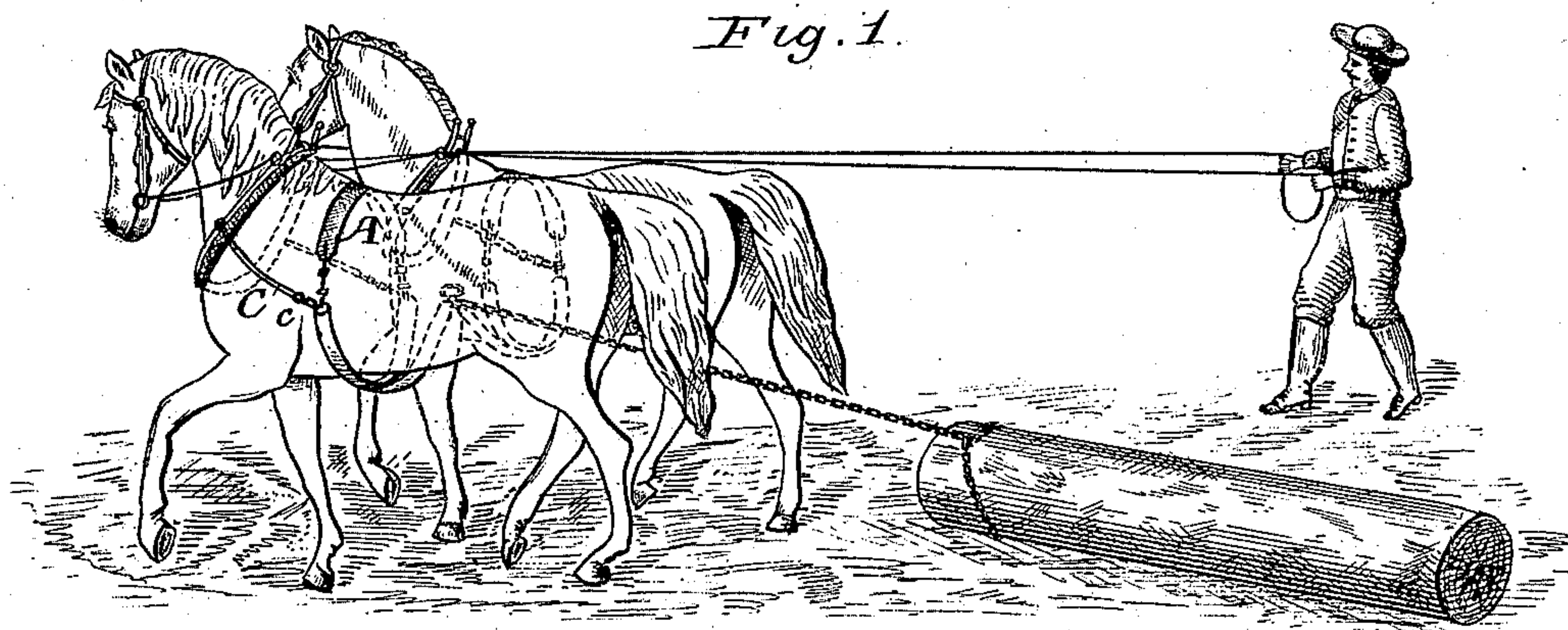


Fig. 5.

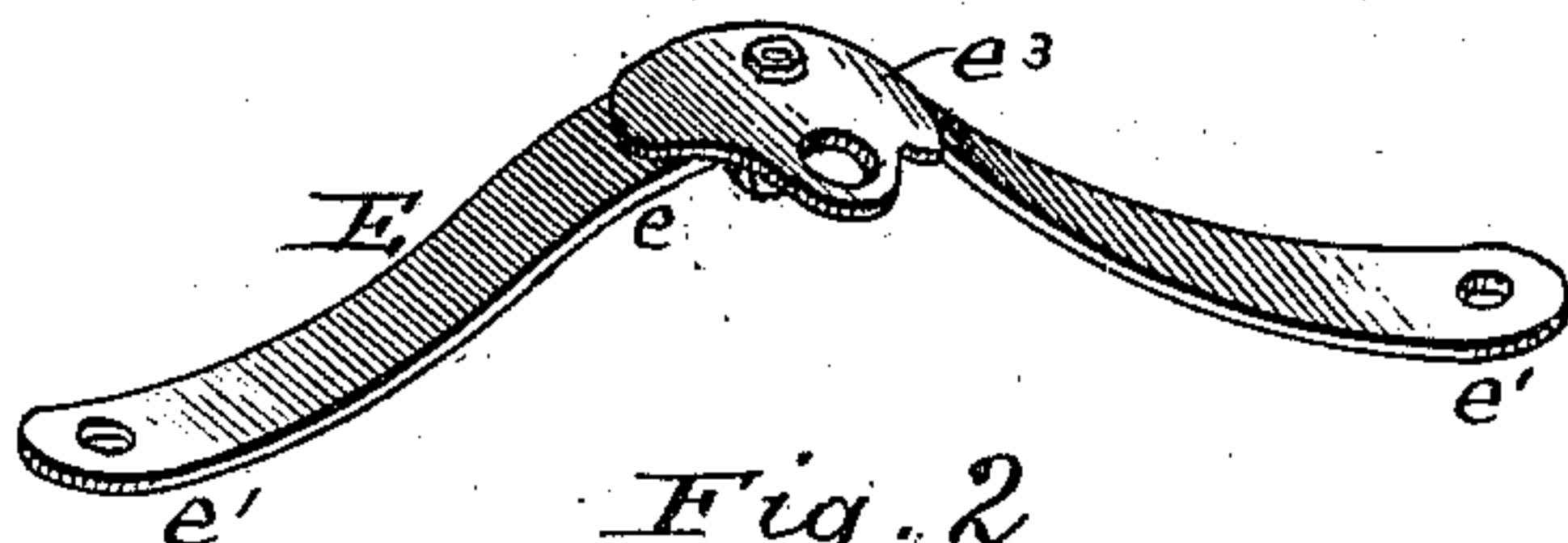


Fig. 2.

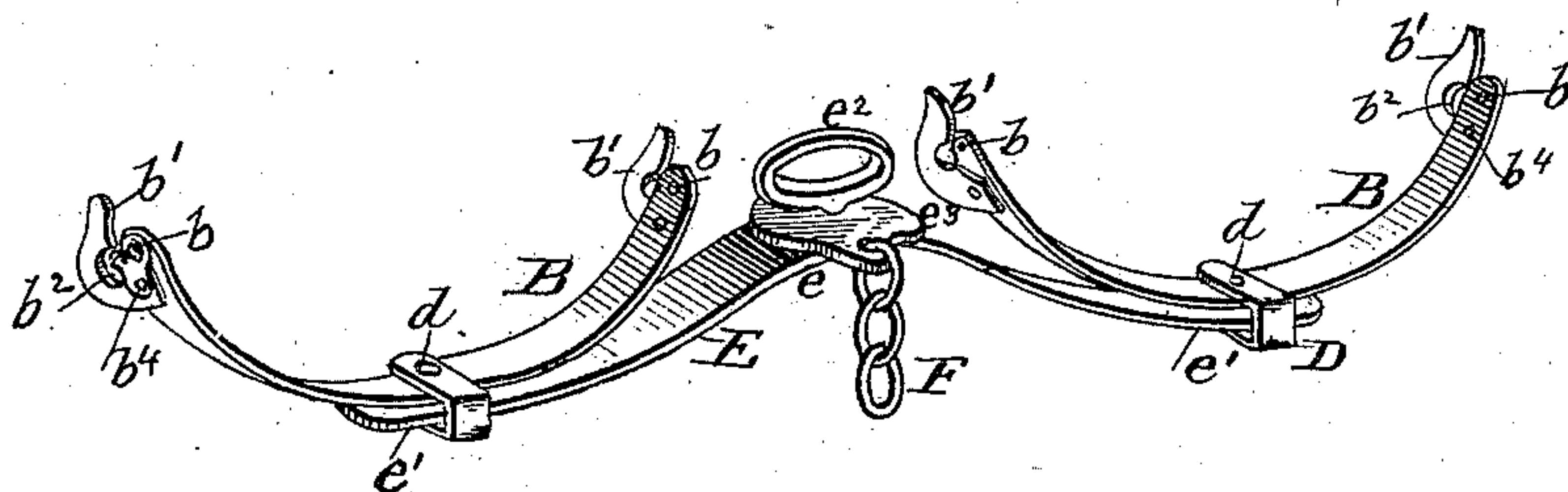


Fig. 3.

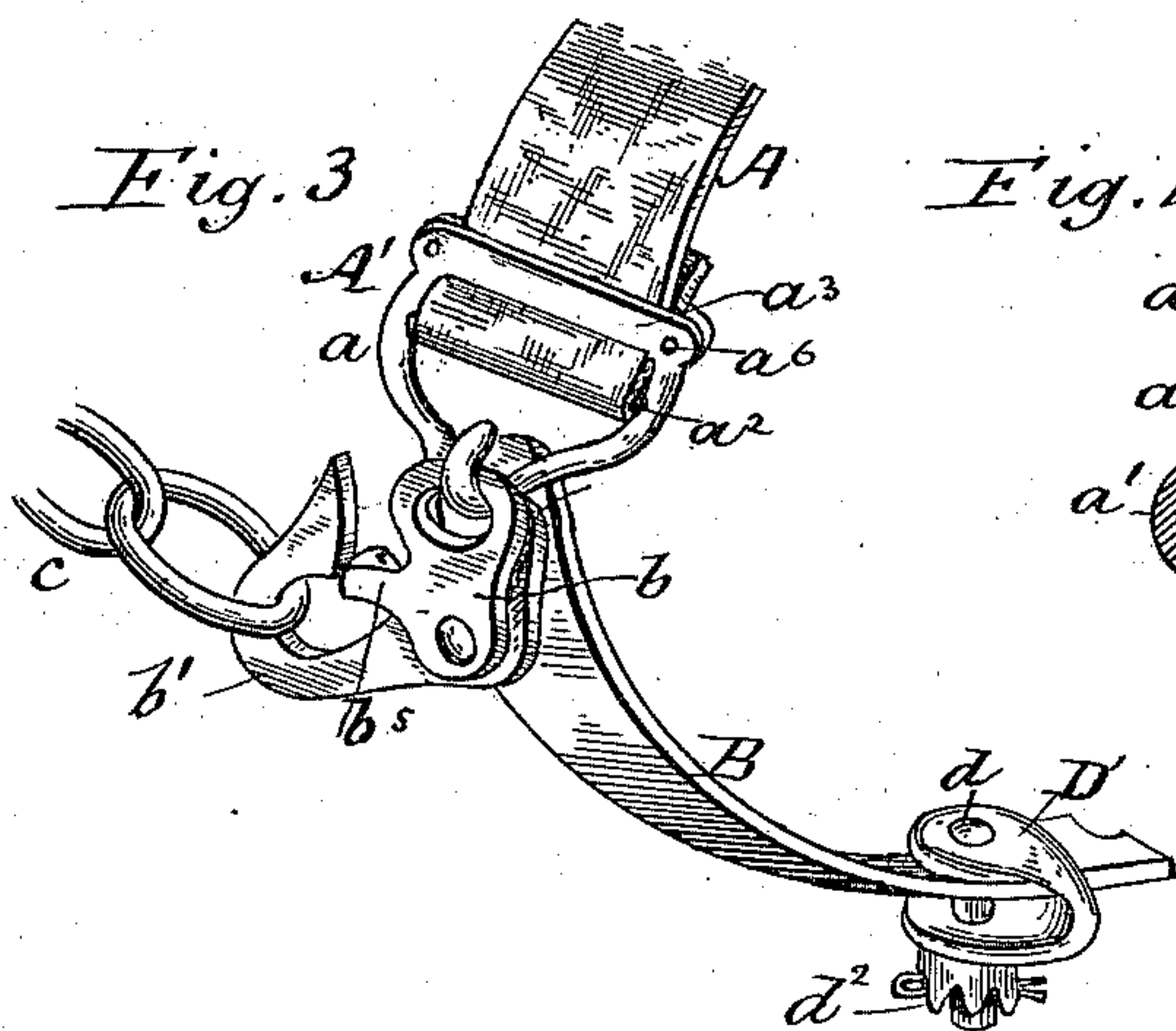
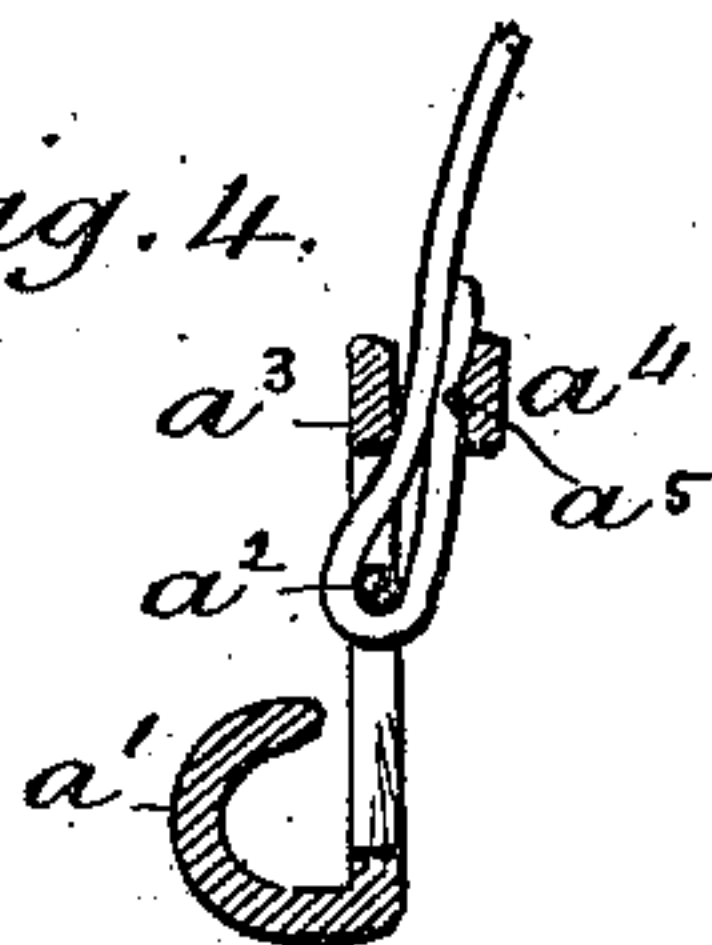


Fig. 4.



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UNITED STATES PATENT OFFICE.

ALLEN SHERWOOD, OF AUBURN, NEW YORK.

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SPECIFICATION forming part of Letters Patent No. 309,317, dated December 16, 1884.

Application filed May 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALLEN SHERWOOD, a citizen of the United States, residing at Auburn, in the county of Cayuga and 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 single-trees, providing a harness which is as well adapted for use in connection with wagons, sleighs, stone-boats, drags, as well as other vehicles, implements, &c.; and my invention consists in certain features of construction hereinafter described, and the novel features of which are specifically set forth in the claims.

Referring to the drawings, Figure 1 is a perspective illustrating the manner of using my improved work-harness. Fig. 2 is a perspective of the yoke employed therein and detached therefrom. Fig. 3 is a perspective view of a portion of one of the segmental metal belly-bands of the yoke and the back-strap hooked thereto. Fig. 4 is a vertical section through the back-strap and hook. Fig. 5 is a perspective of the steel yoke and central plate thereof.

A back-strap, A, is provided with a hooked clamp, A', at each end to connect it with the ends of each segmental band B. This clamp A' is composed of the skeleton frame *a*, having the hook *a'* at the lower end thereof, and the transverse bar *a''*, and around the latter the end of the strap A is made to pass and extend upward beyond the top of the upper transverse bar, *a'''*, of the frame, and at this point a light bar, *a''''*, provided with spurs *a'''''*, is made to bear against the free end of the strap, and said bar *a''''* is united to the bar *a'''* by screws *a''''''* at each end thereof, with the spurs *a'''''* in engagement with the back-strap A. The segmental bands B are provided at each end with permanent hooks *b'*, to receive one of the links of the chain forming one end of the short traces C, extending from the hames.

To prevent the trace-links from accidentally coming off the hooks *b'*, the eyes *b* are pivoted to the ends of the segmental bands B close to the hooks *b'*. These eyes receive the hooks of the back-strap A, and are provided with a lug, *b''*, adapted to project over and within the hook *b'*; but as these eyes *b* are pivoted they can be swung back and out of the way when it is desired to disconnect the traces from the hooks upon the sectional bands B. The back-straps and bands are arranged to encircle the body of the horse, and the latter are preferably secured to the ends of the yoke proper, E, by means of the clevis D and bolt *d*, and upon the latter is placed an adjustably-locked nut, *d''*, so that these parts can at any time be adjusted, and too much looseness in the joints be prevented. The central part of the yoke is arched upwardly, as at *e*, and its ends curved, as at *e'*, to conform to the curvature of the bands B, whereby the central portion of the yoke, when used in connection with draw-bars or draft-poles of wagons, cultivators, reapers, and other implements, passes over the same. The handle *e''* is provided at the apex of the arch, by which it may be carried, and a plate, *e'''*, mounted thereon is provided with an eye to receive one end of a draft-chain, F, whereby means of connections with various implements and with chains and ropes for various purposes are provided. The yoke E is made of spring-steel brought to the proper shape and tempered, so that in case of a sudden obstruction to the load being drawn by the team the yoke has a tendency to spring longitudinally and relieve the team of the effects of the obstruction. The bands B, being adapted to the shape of the body of each horse, prevent in such cases—that is to say, when obstructions are met—injury to the horses, while the yielding of the yoke laterally on account of its resiliency, and the tendency of the apex thereof to be drawn rearwardly, or be tilted in connection with the bearing of the bands against the horses, materially reduces the shock which the team would receive if the yoke were made of rigid metal, as heretofore. Each hook *b'* consists of a plate having a projecting upper end, that is secured to the bands B by rivets, as above described, and said plate may be provided with a spring-catch to lock one of the links of the chain *c* on the end of the short

traces; but I prefer to use the eyes *b*, pivoted to the inner end of the hook, and provided with the lug *b*⁵, to prevent the accidental separation of the chain from the segmental band.

5 I am well aware that it is not broadly new to construct work-harness, comprising the back-bands, short traces, and the lower bands, with rigid arched yokes; and I therefore do not claim the same as my invention; but,

10 Having described my invention and its operation, what I claim is—

1. The combination of the bands A, traces C, suitably connected to the hames, and the bands B, connected to the traces, and pivotally
15 mounted upon the spring-tempered arched steel yoke E, provided at its apex with means for connecting the draft-chain F, all constructed substantially as shown and described.

2. As an improved article of manufacture,
20 the spring-tempered steel yoke E, arched upward in the center of its length, and provided

at that point with a perforated plate for connection with a chain, and a perforation at each end, substantially as and for the purpose described.

25 3. The combination of the segmental band B and the hook *b*¹, secured to one end thereof, with the eye *b* pivoted thereto, and adapted to project within the hook, substantially as and for the purpose described.

30 4. The combination of the segmental band B, the hook *b*¹, secured to one end thereof, and the eye *b*, with the back-strap A and the clamp A¹, provided with transverse bars *a*² and *a*³, and bar *a*⁴, provided with spurs, substantially as and for the purpose set forth. 35

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

ALLEN SHERWOOD.

Witnesses:

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