

(No Model.)

2 Sheets—Sheet 1.

J. H. BRADSHAW.
HARNESS.

No. 450,134.

Patented Apr. 14, 1891.

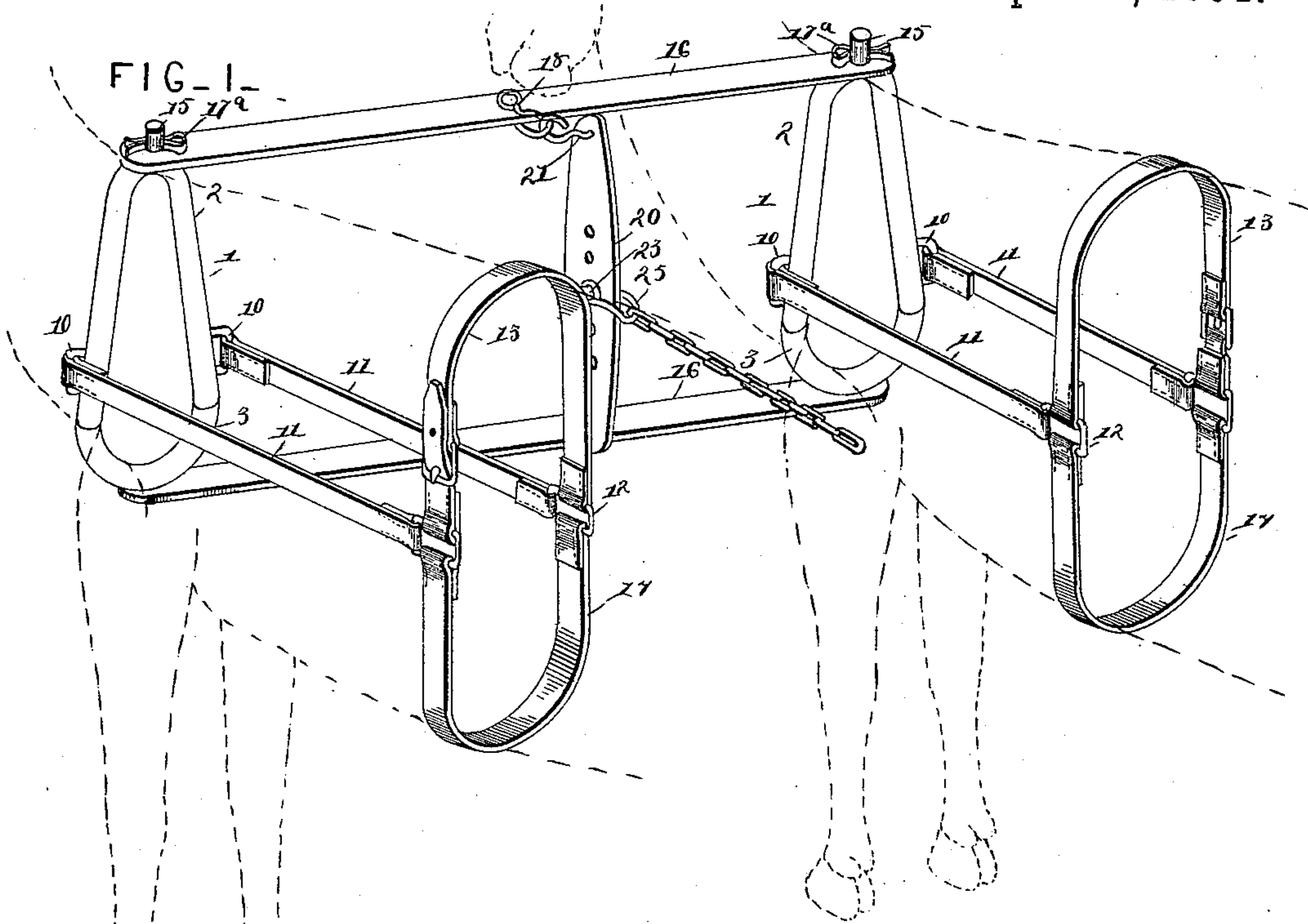
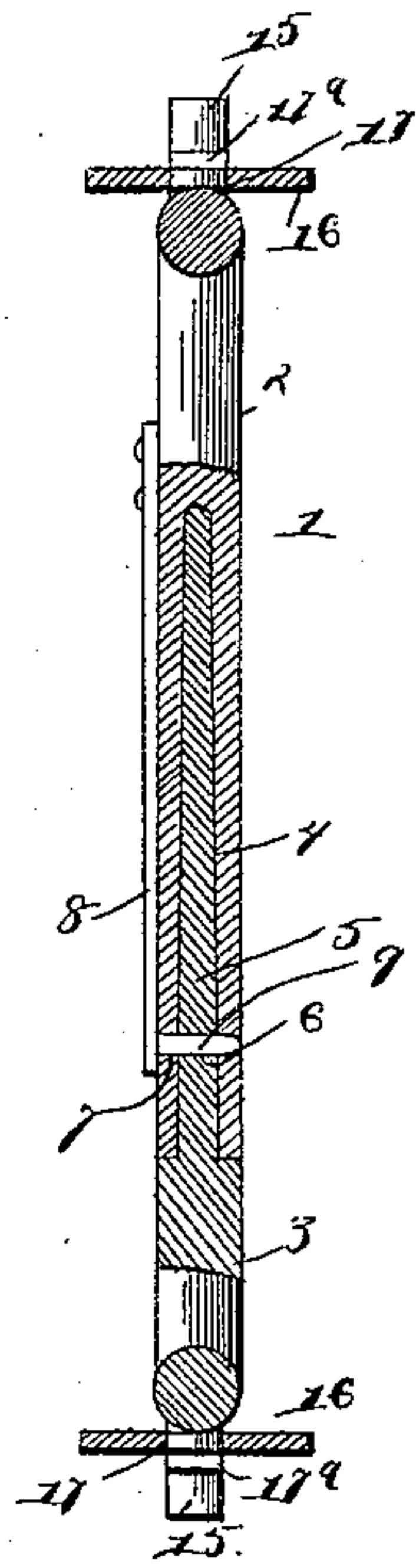


FIG. 4.



Witnesses:
Geo. C. French.

M. S. Duval

By *his* Attorneys,

C. A. Snow & Co.

Inventor
Joseph H. Bradshaw.

(No Model.)

2 Sheets—Sheet 2.

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FIG. 2.

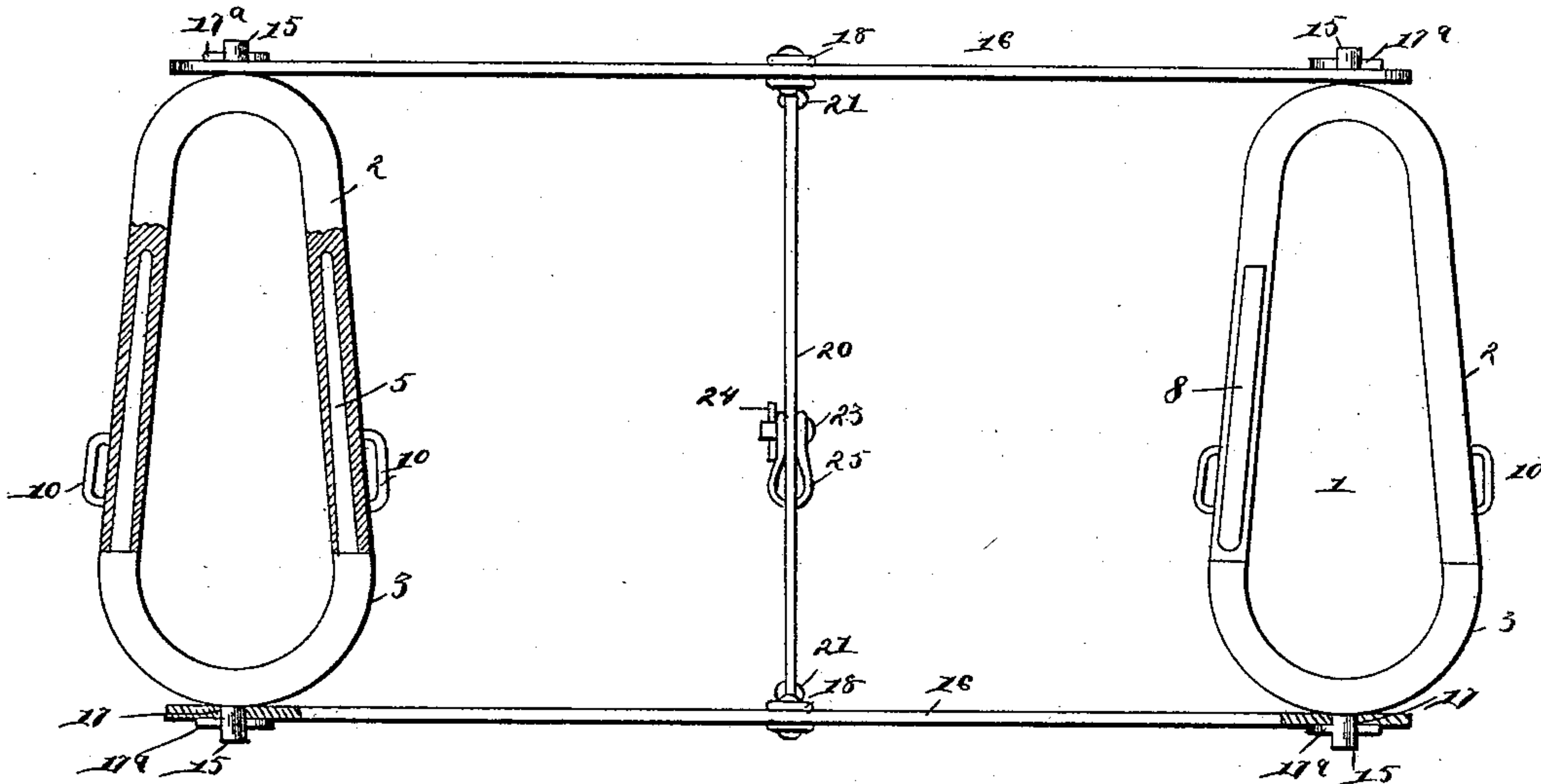
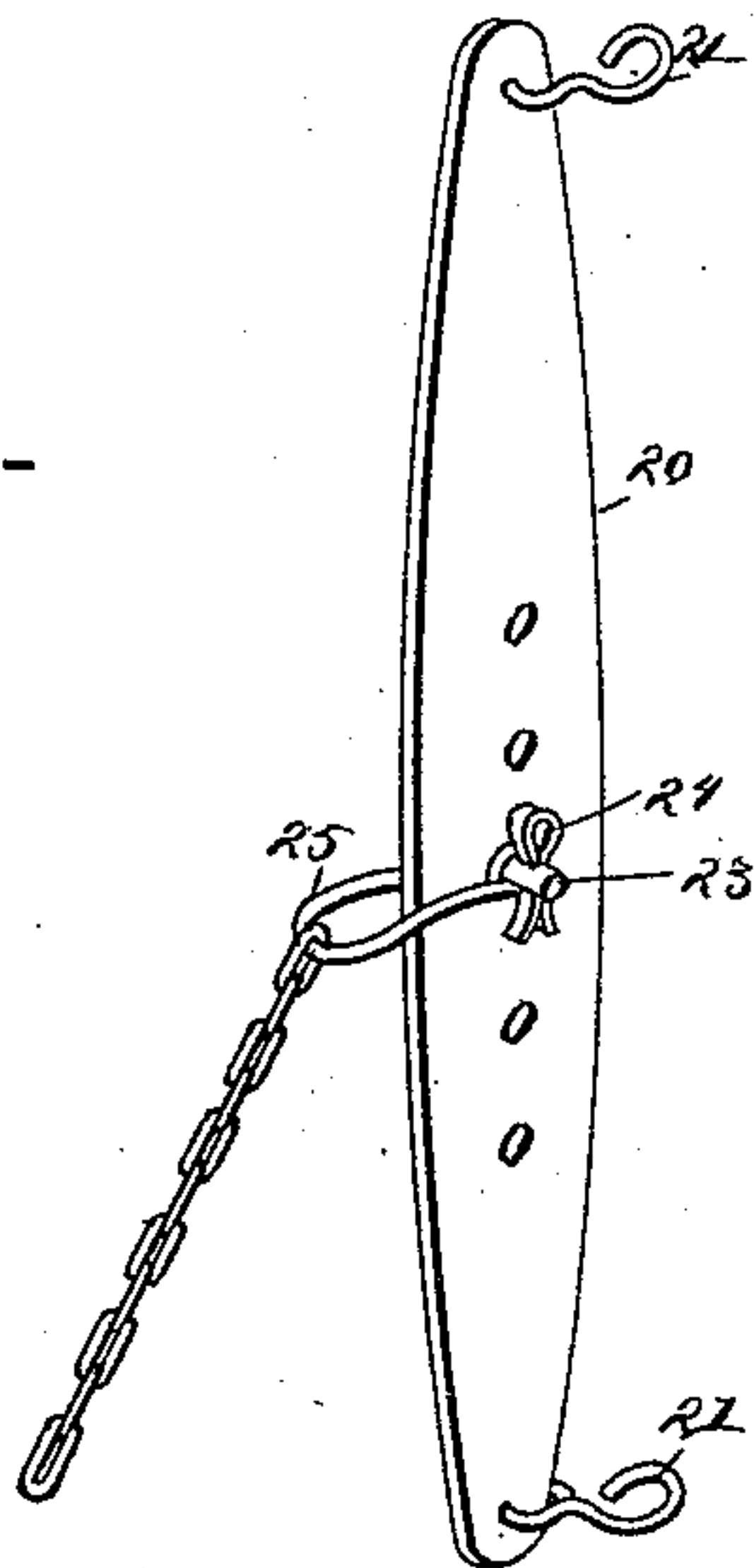


FIG. 3.



Witnesses

Geo. C. Frick,

W. S. Durall

By *his* Attorneys,

C. A. Snow & Co.

Inventor

Joseph H. Bradshaw

UNITED STATES PATENT OFFICE.

JOSEPH H. BRADSHAW, OF NORTH YAKIMA, WASHINGTON, ASSIGNOR OF
ONE-FOURTH TO JOSIAH WILEY, OF SAME PLACE.

HARNESS.

SPECIFICATION forming part of Letters Patent No. 450,134, dated April 14, 1891.

Application filed October 16, 1890. Serial No. 368,291. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. BRADSHAW, a citizen of the United States, residing at North Yakima, in the county of Yakima and State of Washington, have invented a new and useful Harness, of which the following is a specification.

This invention has relation to improvements in that class of harness adapted for heavy draft purposes, and especially for use in logging, though, as will be hereinafter apparent, the invention may be used with great advantage in drawing all kinds of agricultural or other heavy and cumbersome implements.

The objects and advantages of the invention, together with the novel features thereof, will hereinafter appear, and be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a harness constructed in accordance with my invention. Fig. 2 is a front elevation, portions being broken away, of one of the hames. Fig. 3 is a perspective in detail of the vertical draft-bar. Fig. 4 is a vertical section through the connecting-bars and one of the hames.

Like numerals indicate like parts in all the figures of the drawings.

The harness is designed especially for double teams, and by its peculiar construction it will be observed that I obviate the usual traces or draft-chains at the sides of the animals, which tend to chafe them by reason of the constant moving thereof and to so separate the animals as to prevent them from stepping upon each other when making short turns, and, withal, to provide an extremely cheap powerful harness, capable of disposing the strain in such a way as to prevent disabling the horses and throw the same upon such portions of the horses as are designed by nature to withstand it.

The hames 1 are of oval form and each is constructed of an upper and lower section, designated as 2 and 3, respectively. The upper section has its lower terminals provided with sockets 4, and the lower sections each has tenons 5 for entering the sockets, one tenon of each pair having a perforation 6, which is designed to register with a perfora-

tion 7, formed in the corresponding terminal of the upper section, and above said opening is secured a flat spring 8, provided at its free end with a bolt 9, spring pressed through the openings of the upper section and the tenon. It will thus be seen that by withdrawing the bolt the sections of the hames may be separated and introduced over and under the neck of the animal and securely locked in position thereafter. The outer sides of the upper sections are provided with the usual tug-loops 10, in each of which is secured the front ends of a pair of side straps 11, the rear ends of the same connecting with a ring 12, which also has connected therewith the terminals of the back and girth straps 13 and 14, respectively.

At the upper and lower ends the hames are provided with vertically-disposed bearing-studs 15, and the upper and lower studs of the pairs of hames are connected by connecting yoke-bars 16, perforated, as at 17, near their ends for the introduction through the same of said studs, which latter work loosely in the perforations, and are themselves transversely perforated and provided with split locking-pins 17^a, to prevent accidental withdrawal of the lugs from the connecting-bars.

18 designates eyes or loops, which are connected to the centers of each of the connecting-bars 16, the eye or loop of one bar being vertically opposite that of the other.

20 designates a vertical draft-bar provided at its ends with loose swiveled hooks 21, each of which engages an eye 18, and between its ends with a vertical series of perforations 22, through which is passed a bolt 23, removably locked in position by means of a split pin 24, said bolt serving to connect to the draft-bar a draft-bail 25. To the bail is connected a single central draft-chain, to which the draft is applied.

From the above construction it will be apparent that I have succeeded in providing an extremely light, simple, strong, and durable harness especially adapted for the class of work hereinbefore mentioned, which harness consists of very few parts and are so disposed as to avoid crippling the animals, which latter are not encumbered by the usual heavy straps, chains, and trimmings of a draft-har-

ness. The ease and facility with which the harness may be applied to the horses will also be at once recognized, and, furthermore, that through the medium of the perforations in the vertical draft-bar the draft-bail may be raised or lowered, so as to throw the strain at the proper point of the animals.

Having thus described my invention, what I claim is—

1. In a harness, the combination, with a pair of hames provided at their upper and lower ends with lugs or studs, of upper and lower transverse bars perforated at their ends to loosely connect the studs, locking-pins inserted through the studs outside of the bars, eyes located at the centers of the bars, a vertical draft-bar having end hooks engaging the eyes, and a series of perforations and a draft-bail removably mounted in one of said perforations, substantially as specified.

2. In a harness, the combination, with a pair of elliptical hames provided at their upper and lower ends with bearing-studs, each hame being laterally divided to form upper and lower sections, removably connected, of transverse bars having end openings engaging the studs, locking-pins passed through the studs, and a draft-bar connected loosely at its ends to the centers of the transverse bars and provided with a series of adjusting holes or perforations, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH H. BRADSHAW.

Witnesses:

GEO. W. CARY,
CHARLES F. CHAMBERS.