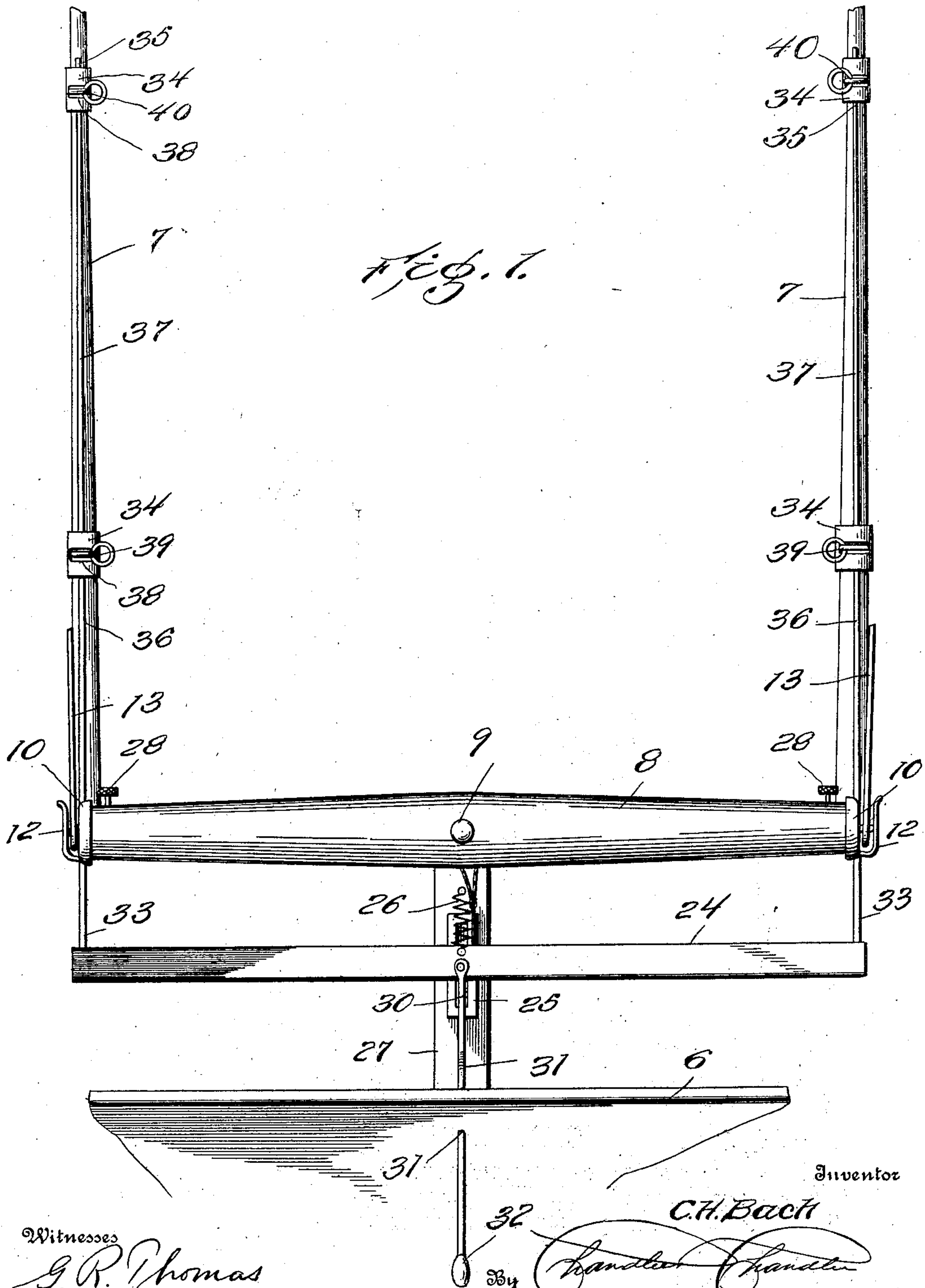


No. 832,526.

PATENTED OCT. 2, 1906.

C. H. BACH.
HORSE DETACHER.
APPLICATION FILED NOV. 1, 1905.

2 SHEETS—SHEET 1.

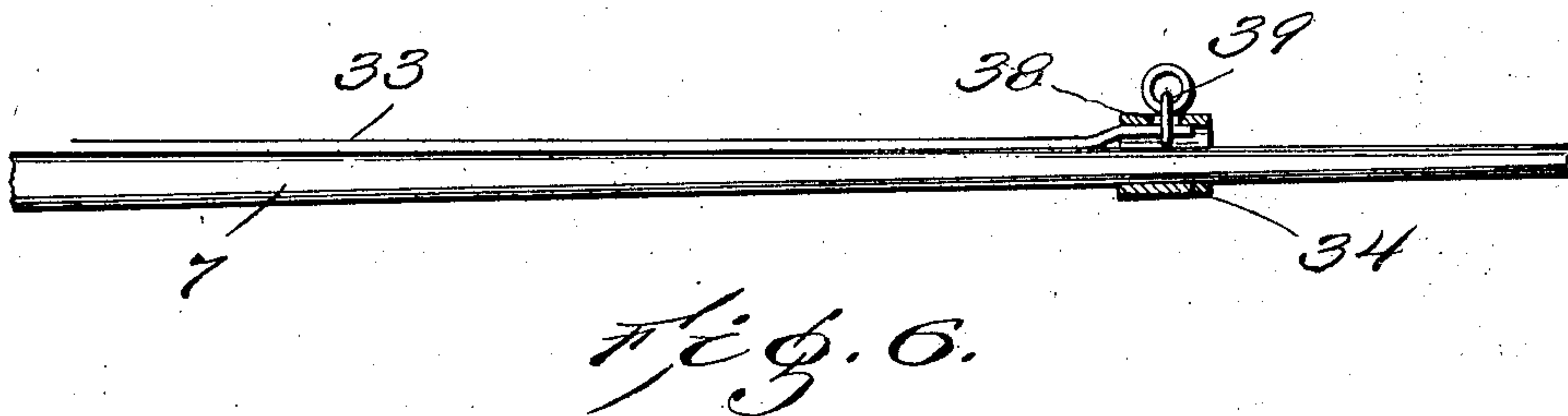
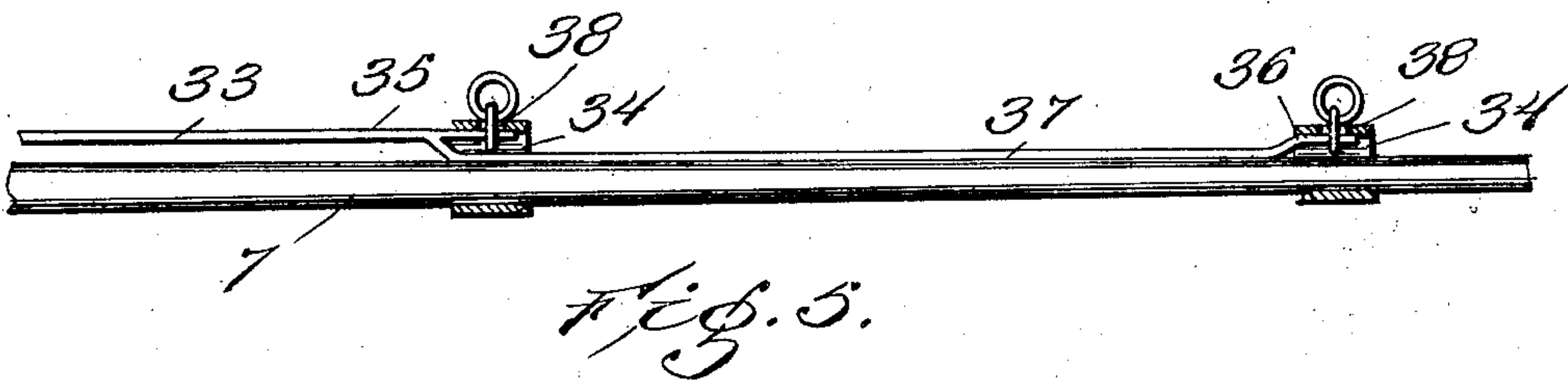
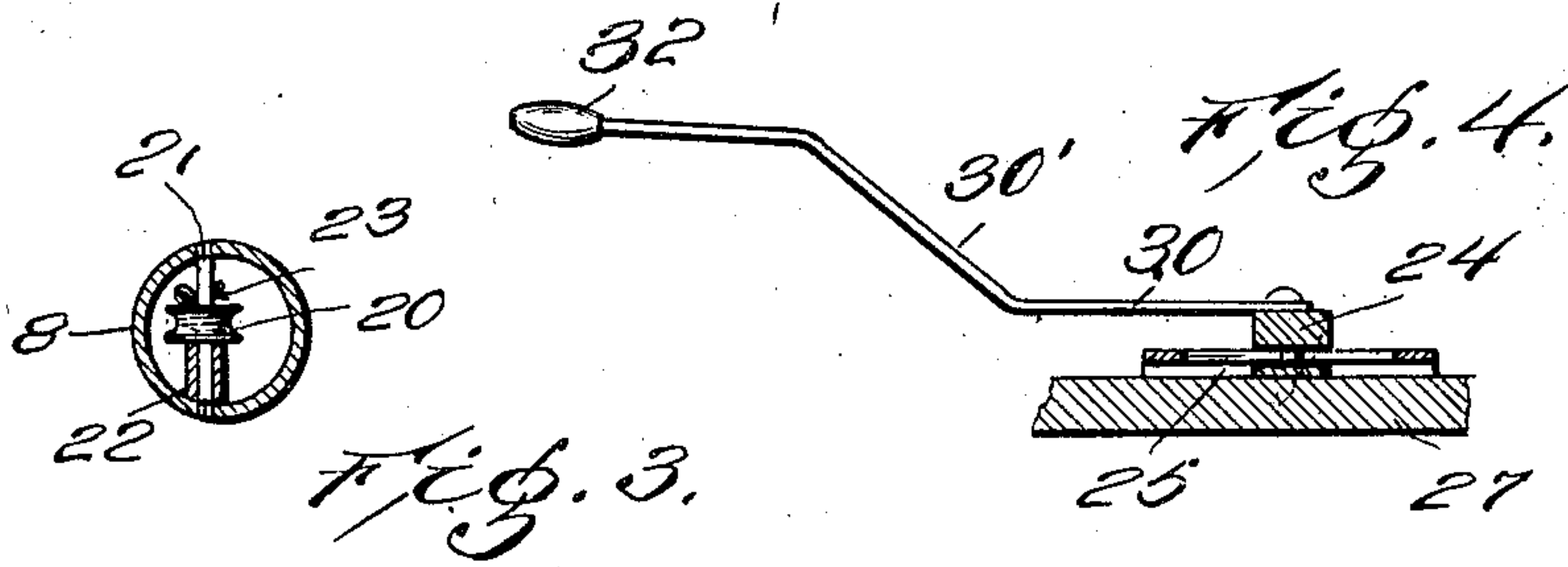
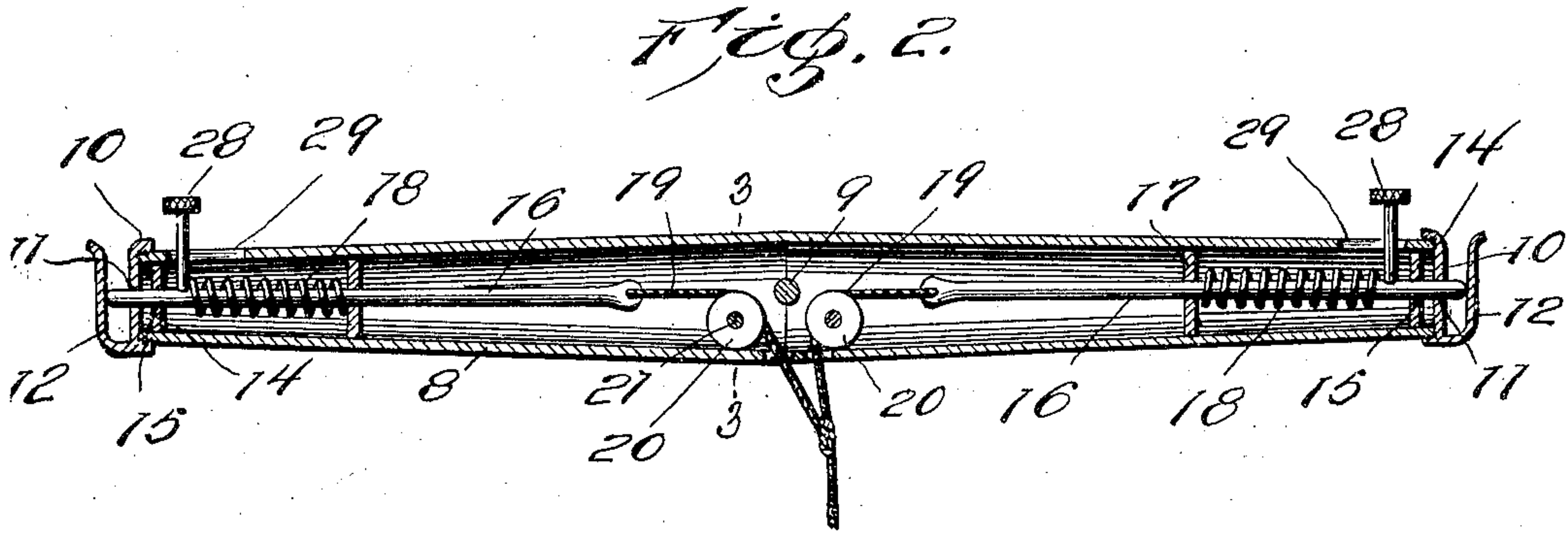


No. 832,526.

PATENTED OCT. 2, 1906.

C. H. BACH.
HORSE DETACHER.
APPLICATION FILED NOV. 1, 1905.

2 SHEETS—SHEET 2.



Witnesses

S. R. Thomas
J. C. Jones

Inventor

C. H. Bach

By

Charles Bach

Attorney

UNITED STATES PATENT OFFICE.

CHARLES H. BACH, OF BROOKS, MINNESOTA.

HORSE-DETACHER.

No. 832,526.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed November 1, 1905. Serial No. 285,414.

To all whom it may concern:

Be it known that I, CHARLES H. BACH, a citizen of the United States, residing at Brooks, in the county of Red Lake, State of Minnesota, have invented certain new and useful Improvements in Horse-Detachers; and I 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 appertains to make and use the same.

This invention relates to horse-detachers, and has for its object to provide a detacher which shall include releasing devices for the traces, shaft-tugs, and holdback-straps.

A further object of the invention is to provide means whereby all of the above-named connections between the horse and the vehicle to which the device is applied may be released simultaneously.

With these and other objects in view the invention consists in the novel construction and arrangement of parts shown in the accompanying drawings, in which—

Figure 1 is a top plan view of the front end of the vehicle with the device in place. Fig. 2 is a longitudinal section through the swingle-tree. Fig. 3 is a section on the line 3-3 of Fig. 2. Fig. 4 is a detail view of the sliding bar and its operating means. Fig. 5 is a detail view of the releasing devices for the tugs. Fig. 6 is a detail view of a modification.

Referring to the drawings, 6 denotes the body of the vehicle, and 7 the shafts of the same. Upon the cross-bar of the shaft is mounted the usual whiffletree 8 by means of a pivot-bolt 9. The said whiffletree 8 is preferably formed of iron pipe, the open end of the same being closed by means of end caps 10, which are each provided with a central aperture 11. Each of the end caps is formed with a guard-finger 12, which extends laterally from said cap and then parallel to the face of the same, and between said last-named portion and the face of the said cap is adapted to be received the ends of traces 13. Mounted in the said whiffletree adjacent the ends of the same are guide-disks 14, provided with central apertures 15, which register with the apertures in the end caps 10, and slidably disposed in the said apertures are bolts 16. A collar 17 is formed on each of said bolts outwardly of the said guide-disks 14, and between each of the said collars and the said disks and encircling the said bolts are springs 18, which serve to hold the said bolts out-

wardly in engagement with the said guard-finger 12. To the inner end of the said bolts are secured chains or other flexible connections 19, which pass over flanged rollers 20, mounted to rotate on bolts 21. The said bolts are squared adjacent their heads to prevent rotation of the same, and a sleeve 22 is carried by each of said bolts, the rollers 20 being mounted between said sleeves and pins 23, which pass through said bolts. The other ends of the flexible connections 19 are connected to a sliding bar 24, which is mounted to slide in guides 25 and to which is connected one end of a spring 26, the other end of said spring being secured to a forwardly-extended portion of the reach-bar 27, upon which the said sliding bar and its guides are mounted. In hitching the bolts 16 may be shot back and the traces engaged with the whiffletree by means of a thumb-piece 28, which works in a slot 29 in the said whiffletree, the bolts being returned to their normal position by the springs 18. Connected to the bar 24 is an operating-lever 30, which extends rearwardly and has its ends adjacent the dashboard of the vehicle bent upwardly and rearwardly, as at 30', and extending through an opening 31 in the said vehicle. A suitable handle 32 is provided for this lever. Connected to each of the ends of the bar 24 is a bolt-rod 33, which is engaged in keepers 34 on its respective shaft. Each of the said bolt-rods is formed with a front and rear portion 35 and 36, respectively, and on each rod adjacent the outer end of its rear portion is formed a connecting portion 37, which projects downwardly and then forwardly in a plane parallel to the said rear portion, the connecting portion being then turned upwardly and to the front portion of the rod. Over the extreme end of the front and rear portions are the keepers 34, which are in the form of clips which embrace the shafts 7 and are secured thereon in any suitable manner and which are slotted, as at 38. Rings 39 and 40 on the shaft-tugs and holdback-straps, respectively, are inserted in the said slots, and through the rings are engaged the extreme ends of the front and rear portions of the bolt-rods 33.

From the foregoing it will be seen that by pulling back on the lever 30 the bar 24 will be moved, also the bar 27, thereby operating the bolts 16 to release the traces and sliding the bolt-rods 33 rearwardly, causing the extreme ends of the same to become disengaged from

the rings on the shaft-tugs and holdback-straps.

In Fig. 6 I provide only one keeper 34 on the shaft, and hence omit the connecting
5 portion 37, the said keeper being for the shaft-tugs.

What I claim is—

1. The combination with a vehicle and its shafts, of a hollow whiffletree, bolts mounted
10 to slide in said whiffletree, a slidable bar mounted between said shafts, connections between said bolts and said bar, a second bar carried by said first-named bar, bolt-rods
15 their inner ends connected to said second-named bar, keepers on said shafts, and means for operating said first-named bar.

2. The combination with a vehicle and its shafts, of a hollow whiffletree, bolts mounted

to slide in said whiffletree, a bar slidably 20 mounted between said shafts, a second bar carried by said first-named bar, bolt-rods mounted to slide on said shafts and having their inner ends connected to said second-named bar, each of said bolt-rods comprising 25 a front and a rear portion, a connecting portion extending downward and forwardly from said front portion adjacent its end and connecting the said front and rear portions, slotted keepers carried by said shafts, a lever 30 for operating said first-named bar, and a spring for returning it to its normal position.

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

CHARLES H. BACH.

Witnesses:

O. C. MOORE,

W. B. CHESHIRE.