

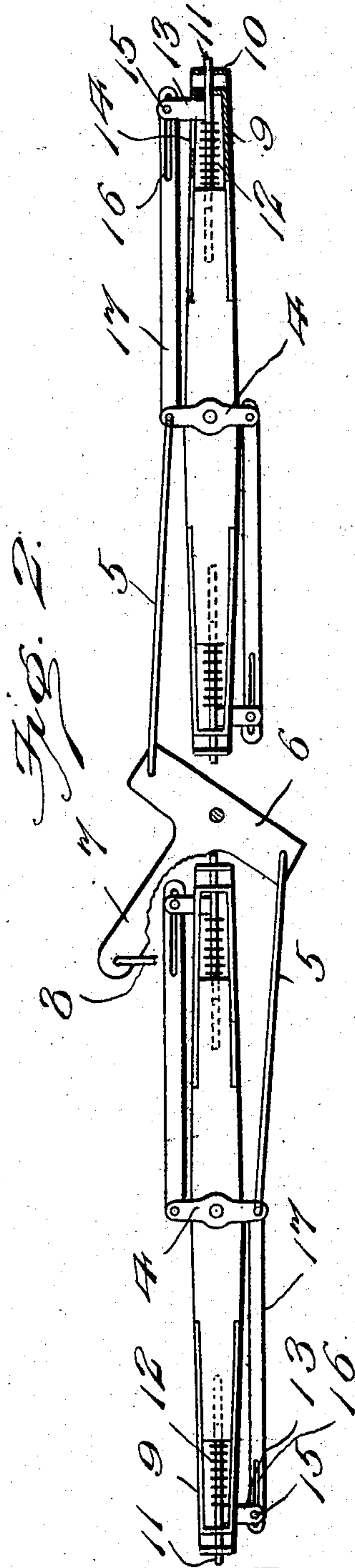
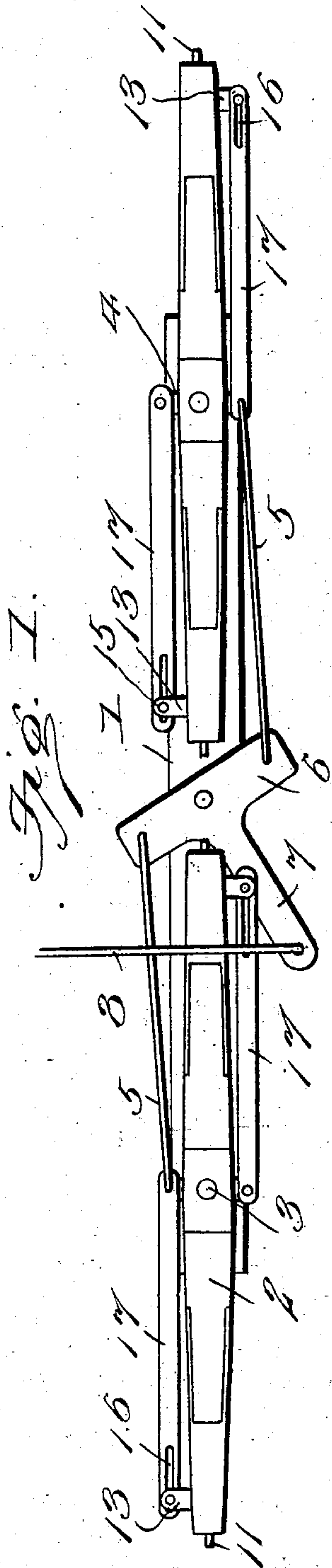
No. 753,910.

PATENTED MAR. 8, 1904.

J. PEARSON.
HORSE DETACHER.

APPLICATION FILED OCT. 28, 1903.

NO MODEL.



Witnesses

Wm. J. North
Herbert Lawson

Inventor

John Pearson

By

Victor J. Crane

Attorney

UNITED STATES PATENT OFFICE.

JOHN PEARSON, OF NORTHWOOD, NORTH DAKOTA.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 753,910, dated March 8, 1904.

Application filed October 28, 1903. Serial No. 178,863. (No model.)

To all whom it may concern:

Be it known that I, JOHN PEARSON, a citizen of the United States, residing at Northwood, in the county of Grand Forks and State of North Dakota, have invented new and useful Improvements in Horse-Detachers, of which the following is a specification.

My invention relates to new and useful improvements in horse-detachers; and its object is to provide a device of this character especially adapted for use in connection with two-horse teams and which can be operated from the seat of a vehicle and will simultaneously detach the traces of the harness from the swingletree.

With the above and other objects in view the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a plan view of a doubletree having my improved detacher thereon, and Fig. 2 is a bottom plan view thereof with the whiffletree removed and with the operating-lever partly broken away.

Referring to the figures by numerals of reference, 1 is a whiffletree having swingletrees 2 pivoted thereon at the ends thereof. The pivoted pins 3 of the swingletrees also serve as pivots for centrally-fulcrumed levers 4, and one end of each lever is connected by means of rods 5 with the ends of a T-shaped operating-lever 6, which is fulcrumed upon the whiffletree and the arm 7 of which is provided with an operating-arm 8, which is adapted to extend backward to the seat upon the vehicle. Each end of each swingletree is inclosed by a casing 9, having an L-shaped extension 10 at the end thereof, and slidably mounted within this extension and within the casing is a plunger 11, which is held normally projected into the extension 10 by means of a coiled spring 12. This spring bears at opposite ends upon the adjacent end of the swingletree and upon an ear 13, which extends from the rod and is slidably mounted in a slot 14, formed in the casing 9. A pin 15 is arranged upon the ear 13 and projects into a

slot 16, arranged longitudinally in a rod 17, which is pivoted to the lever 4, located under the swingletree.

When it is desired to secure traces to the swingletrees, the ears 13 are grasped and slid backward so as to compress the springs 12, and the traces are then inserted into the extensions 10 and the ears released, so as to permit the plungers to spring into engagement with the traces. The backward movement of the plungers is permitted in view of the fact that the pins 15 are mounted in the slots 16. When it is desired to detach the traces from the swingletrees, the rod 8 is pressed forward so as to swing the operating-lever 6 upon its fulcrum and draw upon levers 4 through the rods 5. These levers will pull the bars 17, connected thereto, in opposite directions and will move the ears 13 therewith and cause the plungers 11 to be simultaneously retracted from the extensions. As soon as the operating-lever 6 is released the several springs 12 will return all of the parts to their normal positions. It will be seen that the device is extremely simple and inexpensive in construction and affords efficient means for detaching horses, thereby rendering the device extremely desirable where spirited horses are employed.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In a device of the character described, the combination with a whiffletree having a swingletree thereon, and an operating-lever fulcrumed upon the whiffletree; of a lever interposed between the whiffletree and the swingletree and projecting from opposite sides thereof, spring-pressed plungers slidably mounted within the ends of the swingletree, trace-receiving extensions normally engaged by the plungers, rods connecting the ends of the lever with the plungers, and a rigid

connection between said lever and the operating-lever.

2. In a device of the character described, the combination with a whiffletree having a
5 swingletree pivoted thereon, and an operating-lever fulcrumed upon the whiffletree; of a lever interposed between the whiffletree and the swingletree, a rod connecting the two levers, spring-pressed plungers slidably mounted
10 in the ends of the swingletree, trace-receiving extensions normally engaged by the plungers, ears extending from the plungers, and rods connecting the ears with the projecting ends of the interposed lever.

15 3. In a device of the character described, the combination with a whiffletree having an operating-lever fulcrumed thereon, and a swingletree pivoted upon the whiffletree; of a transversely-extending lever interposed between
20 the whiffletree and the swingletree, a rod connecting said levers, a casing upon each end of the swingletree, an angular extension thereto, a spring-pressed plunger slidably mounted in each casing and normally engaged

ing the extension, an ear upon each plunger, 25 a slotted rod connected to each ear and to the transversely-extending lever, and means for rotating the operating-lever.

4. In a device of the character described, the combination with a whiffletree having swin- 30 gletrees pivoted thereon, and an operating-lever interposed between the swingletrees; of transversely-extending levers mounted between the whiffletree and the swingletrees, casings upon the ends of the swingletrees, an- 35 gular trace-receiving extensions thereon, spring-pressed plungers slidably mounted within the casings and normally engaging the extensions, ears upon the plungers, slotted rods connected to the ears and the transversely- 40 extending levers, and rods connecting said levers with the operating-lever.

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

JOHN PEARSON.

Witnesses:

T. S. SARGENT,
W. H. SHULZE.