

(No Model.)

A. BRAUER & W. KELSO.
DRAFT GEAR FOR CARS.

No. 581,192.

Patented Apr. 20, 1897.

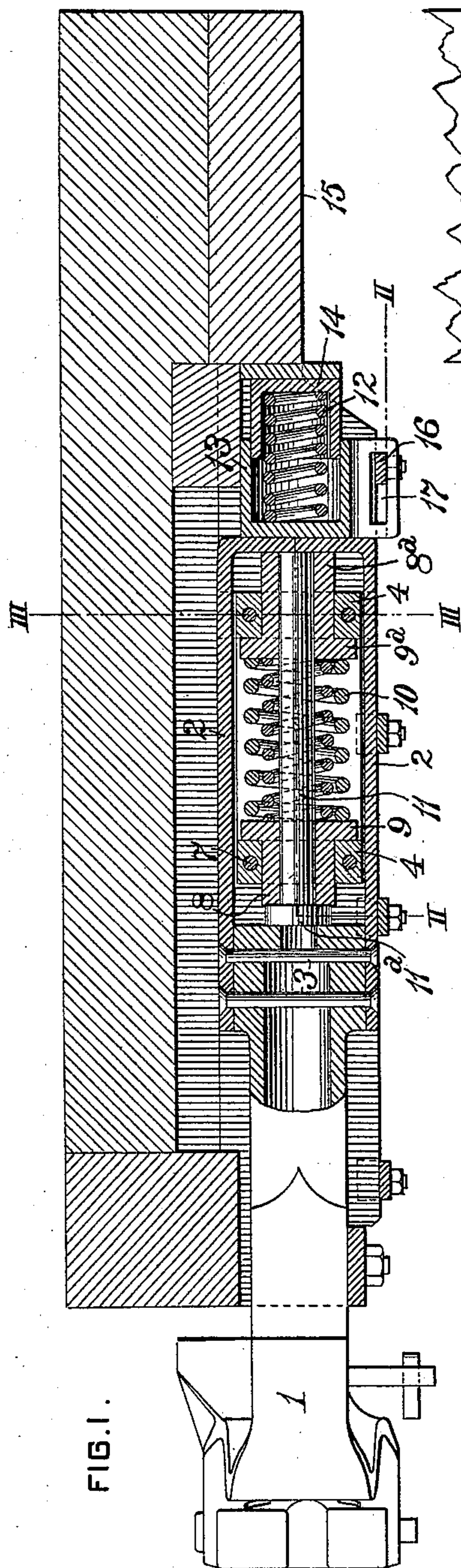


FIG. 1.

WITNESSES:

Chas. F. Miller.
J. E. Gaither

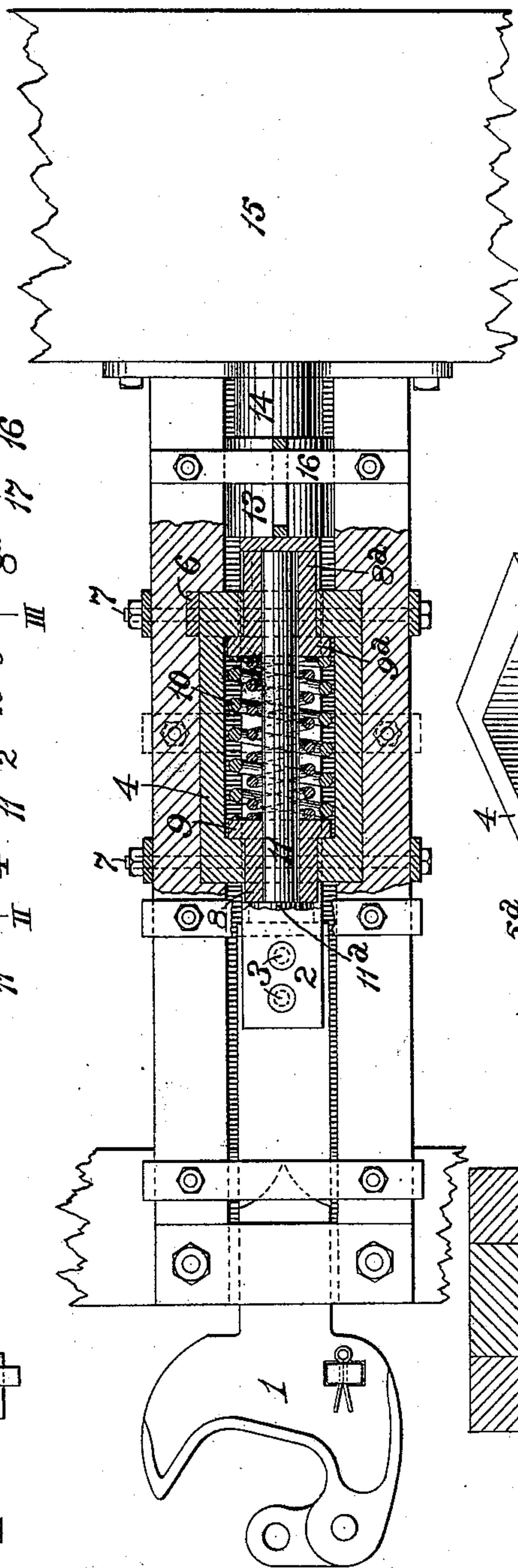


FIG. 2.

INVENTORS,

William Kelso &
Albert Brauer
by Saml. B. Wolcott

Att'y.

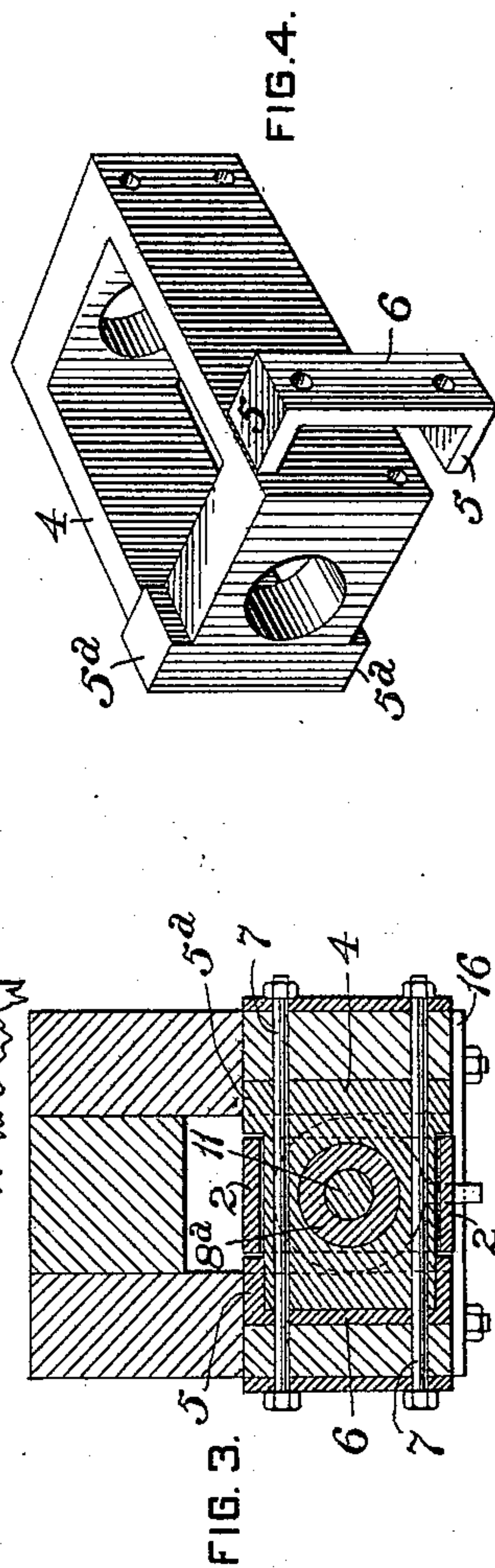


FIG. 3.

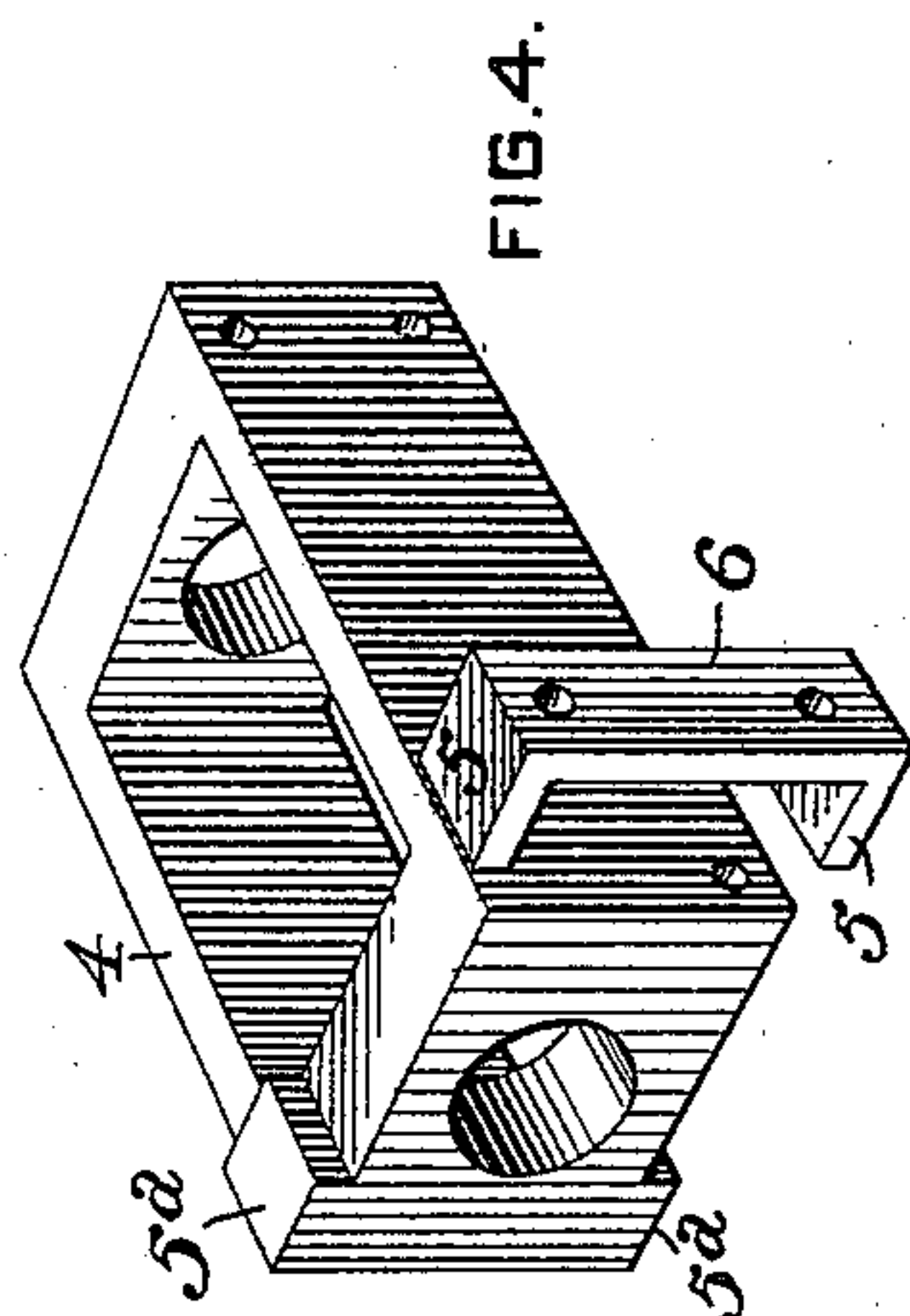


FIG. 4.

UNITED STATES PATENT OFFICE.

ALBERT BRAUER, OF PITCAIRN, AND WILLIAM KELSO, OF PITTSBURG,
PENNSYLVANIA, ASSIGNORS OF ONE-HALF TO ANDREW J. DRAKE
AND MICHAEL J. McMANN, OF PITTSBURG, PENNSYLVANIA.

DRAFT-GEAR FOR CARS.

SPECIFICATION forming part of Letters Patent No. 581,192, dated April 20, 1897.

Application filed February 16, 1897. Serial No. 623,599. (No model.)

To all whom it may concern:

Be it known that we, ALBERT BRAUER, residing at Pitcairn, and WILLIAM KELSO, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, citizens of the United States, have invented or discovered certain new and useful Improvements in Draft-Gear for Cars, of which improvements the following is a specification.

The invention described herein relates to certain improvements in draft mechanism for railway-cars and has for its object a construction wherein a solid spring-box can be used in connection with a draft-yoke connection to the coupler, said parts being so constructed and arranged as to permit of the removal of the spring-box without detaching the yoke from the coupler.

It is a further object of the invention to provide a brace or support to prevent any buckling or bending of the yoke when an auxiliary buffing-spring is employed.

In general terms the invention consists in the construction and combination substantially as hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional elevation of a draft mechanism having our improvements applied thereto. Fig. 2 is a sectional plan view of the same. Fig. 3 is a transverse section, the plane of section being indicated by the line III III, Fig. 1; and Fig. 4 is a perspective view of the spring-box and its detachable guide.

In the practice of the invention a coupler 1 of any suitable form or construction is employed, and to the barrel of the coupler are secured the ends of the draft yoke or loop 2, preferably by means of rivets 3. The solid spring-box 4 is arranged between the reins or sides of the yoke or loop, which is guided in its back-and-forth movements by shoulders or blocks 5 and 5^a, the latter being on opposite sides of the box, while the blocks 5 are formed integral with a band 6, which serves to hold them in proper position on opposite sides of the box, as shown in Figs. 3 and 4. The box is held in the mortises in the sides of the center sills of the cars by bolts 7, pass-

ing through the sills and box. Before placing the box in position in the yoke or loop, sleeves 8 8^a, provided with heads or enlargements 9 9^a, are inserted in openings in the ends of the box in such direction that the heads will be within the box. Combined draft and buffing springs 10 are placed in the box between the heads 9 9^a and are held in such position by a pin 11, passing through the sleeves and springs, as shown in Figs. 1 and 2. This pin is made of a length equal to the distance between the barrel of the coupler and the end of the yoke, as shown, its front end being preferably provided with a head 11^a, against which the end of the sleeve 8 bears. The outer end of the sleeve 8^a bears against the end of the yoke or loop. The sleeves, springs, and pin having been placed in position in the box, the latter is slid laterally into yoke or loop, and the band 6, with the shoulders or blocks 5, is placed in position and the entire draft mechanism secured in position between the center sills of the car by the bolts 7.

When it is desired to use auxiliary buffing-springs 12, they are preferably arranged in a collapsible case consisting of the shells 13 and 14, one fitting within the other. This case, with its contained spring, is interposed between the rear end of the yoke or loop and a buffing-timber 15, arranged transversely of the longitudinal sills of the car. The case is held in position by a bar 16, passing through a loop 17, formed on the outer shell of the case and secured at its ends to the center sills of the car-frame.

Any buckling or bending of the yoke or loop by reason of the resistance presented by the auxiliary springs 12 during buffing is prevented by the pin 11, which, as heretofore stated, bears at its ends against the coupler-barrel and the end of the yoke or loop, thereby forming a rigid brace for the latter.

It will be readily understood by those skilled in the art that while an efficient guide for the yoke or loop is formed by the shoulders or blocks the removability of one pair of blocks permits of the removal of the solid box from the yoke or loop without detaching the latter from the coupler-barrel.

We claim herein as our invention—

1. In a draft mechanism, the combination
of a coupler, a draft yoke or loop secured to
the coupler and a solid spring-box provided
with removable guide-blocks, thereby per-
5 mitting of the box being inserted in and re-
moved from the yoke or loop without detach-
ing the latter from the coupler, substantially
as set forth.

2. In a draft mechanism, the combination
10 of a coupler, a draft yoke or loop secured to
the coupler, an auxiliary spring arranged in

the rear of the yoke or loop, and a pin arranged
within the yoke and adapted to prevent any
buckling or bending of the yoke or loop dur-
ing buffing, substantially as set forth. 15

In testimony whereof we have hereunto set
our hands.

ALBERT BRAUER.
WILLIAM KELSO.

Witnesses:

DARWIN S. WOLCOTT,
F. E. GAITHER.