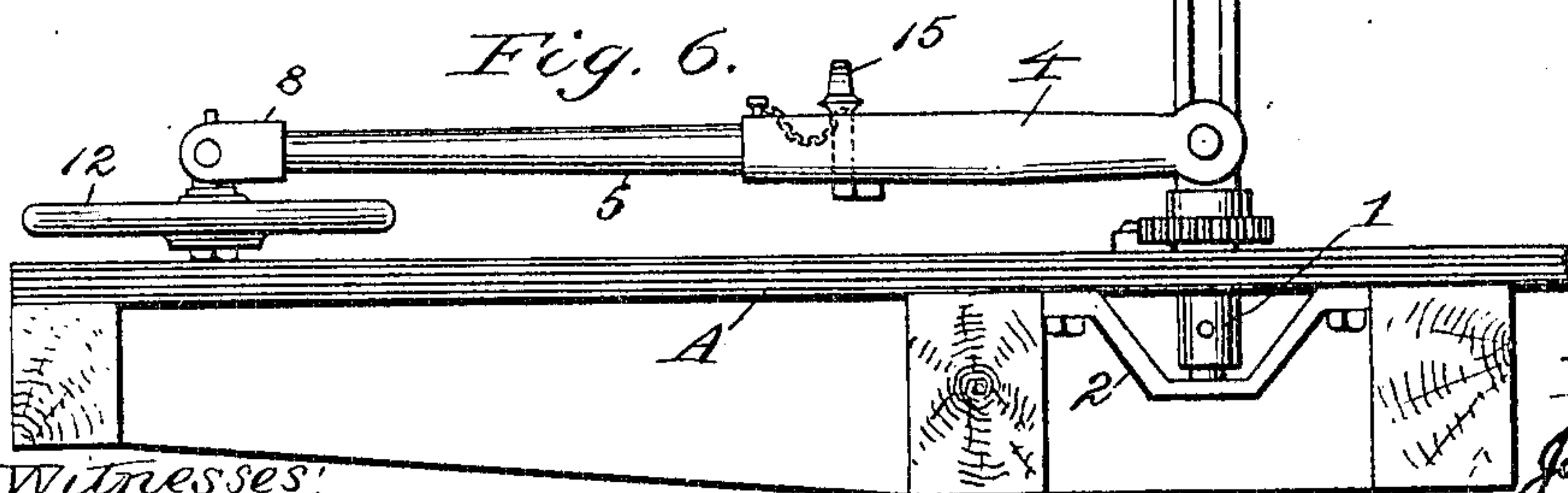
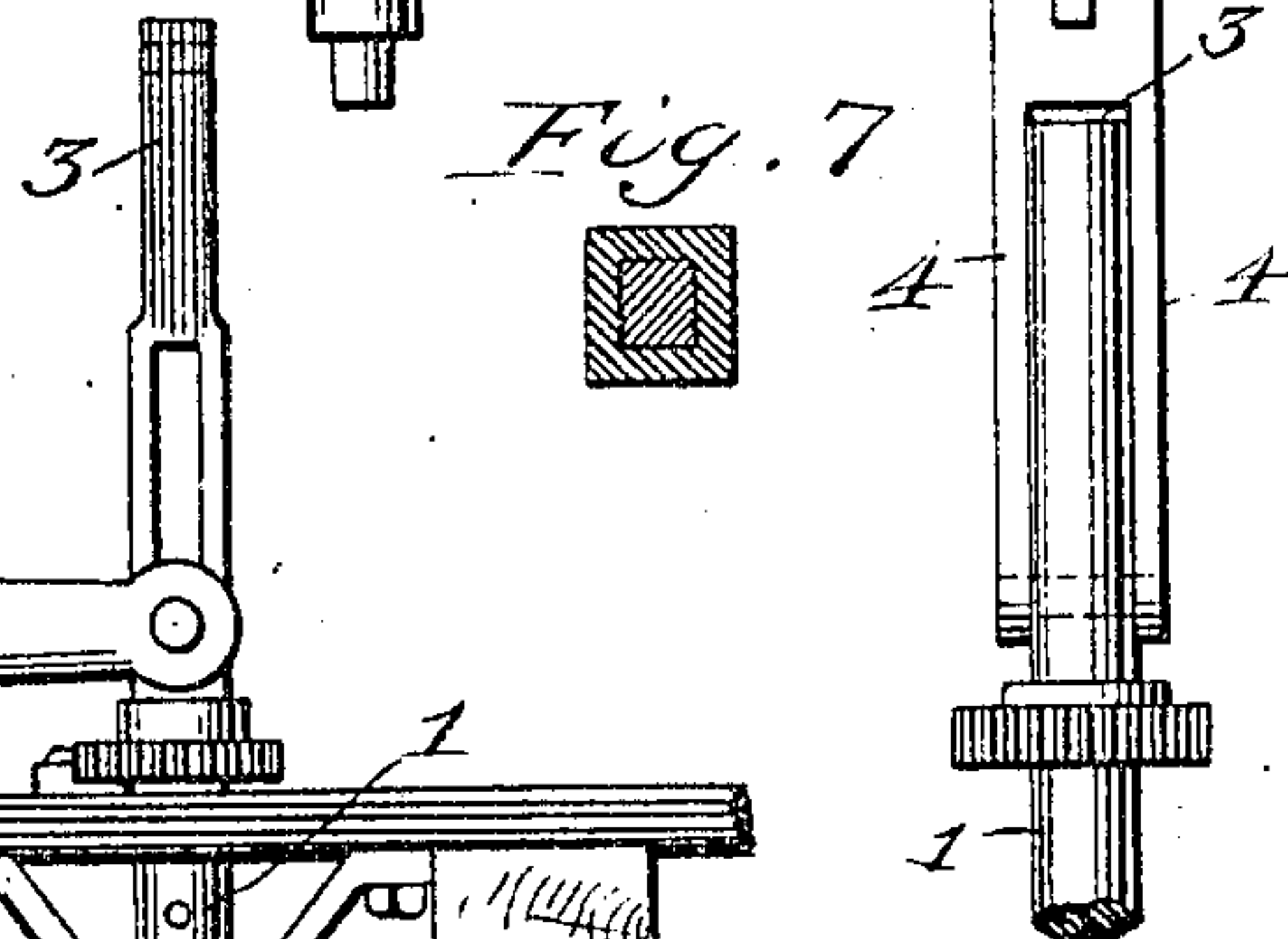
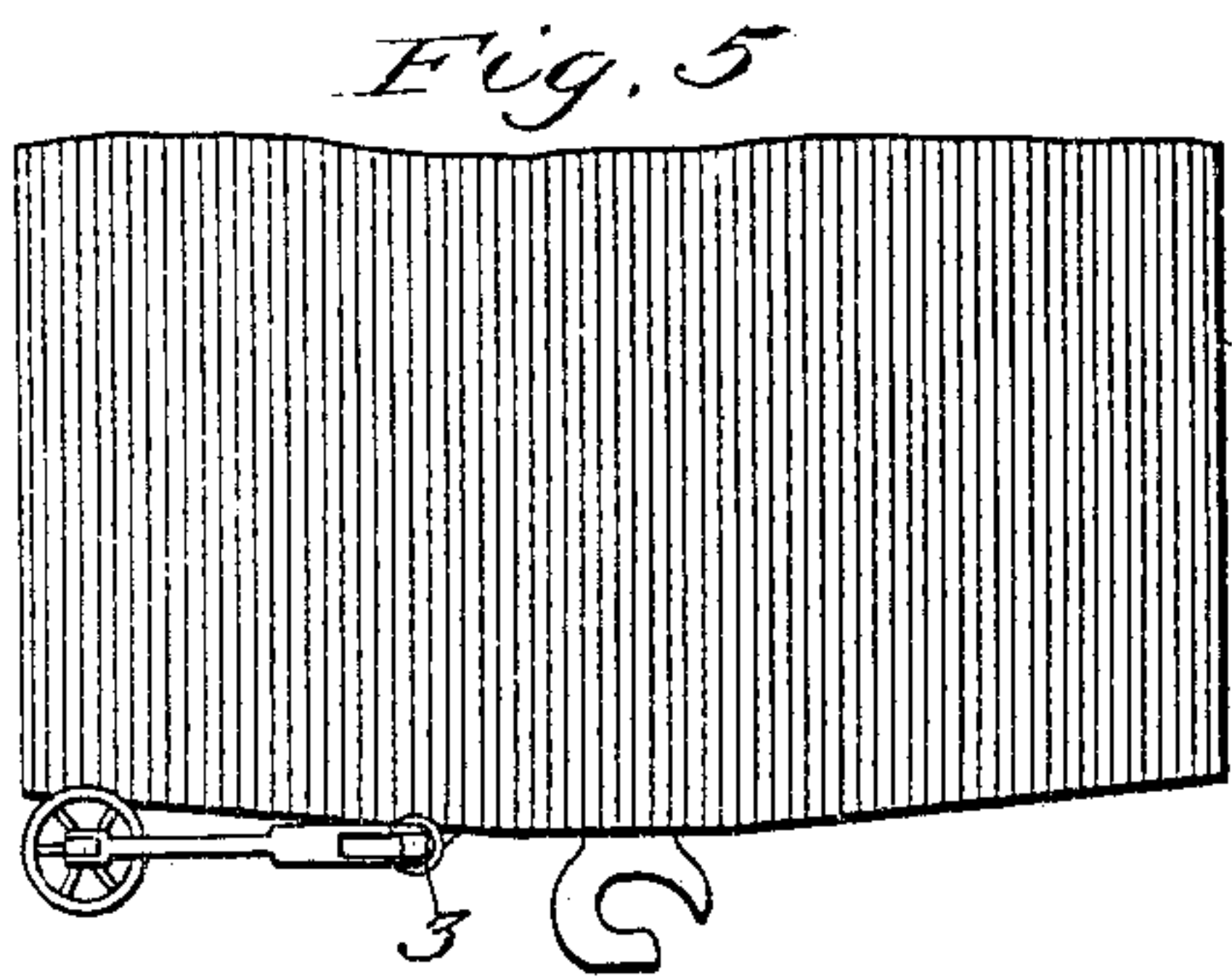
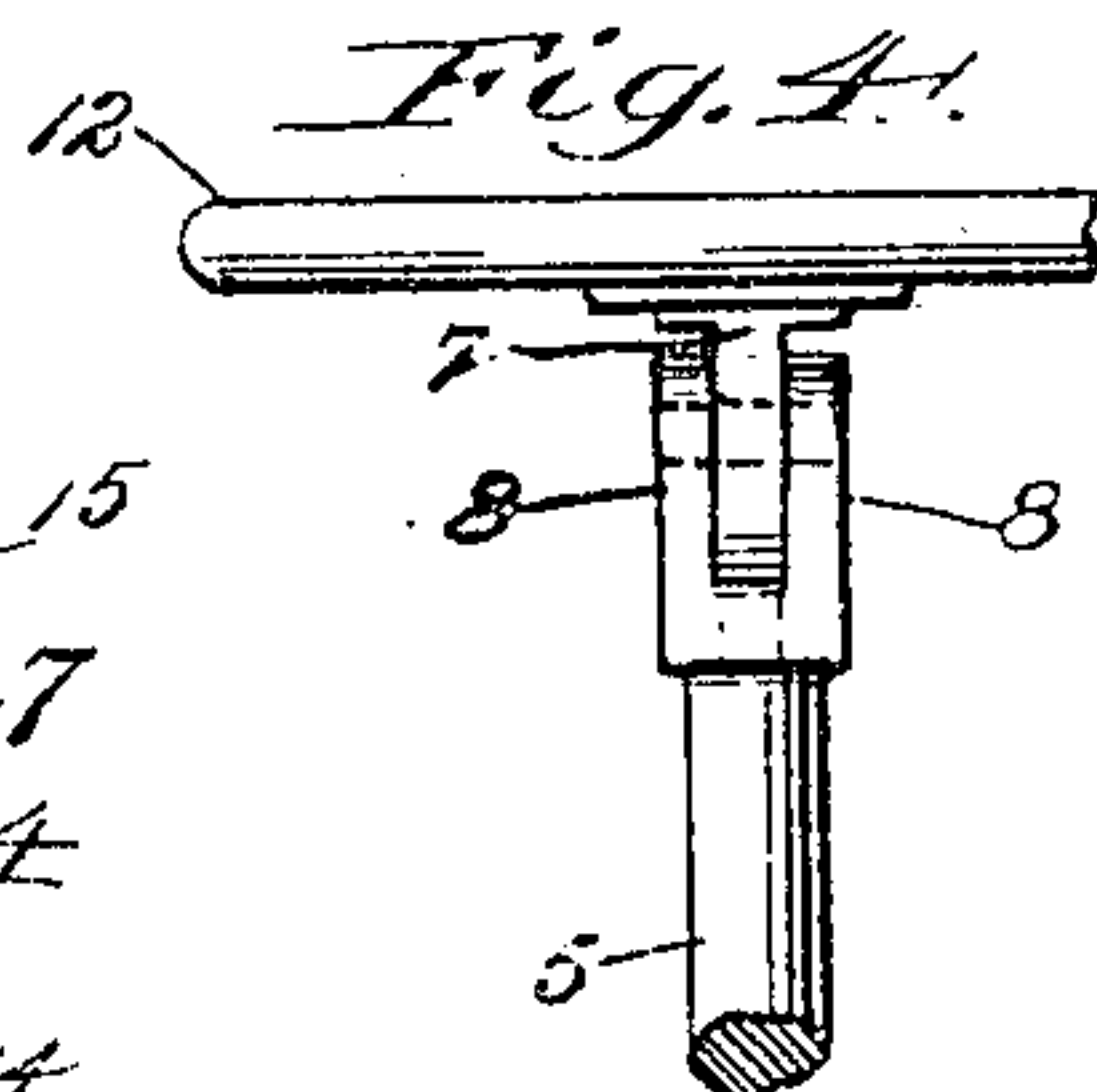
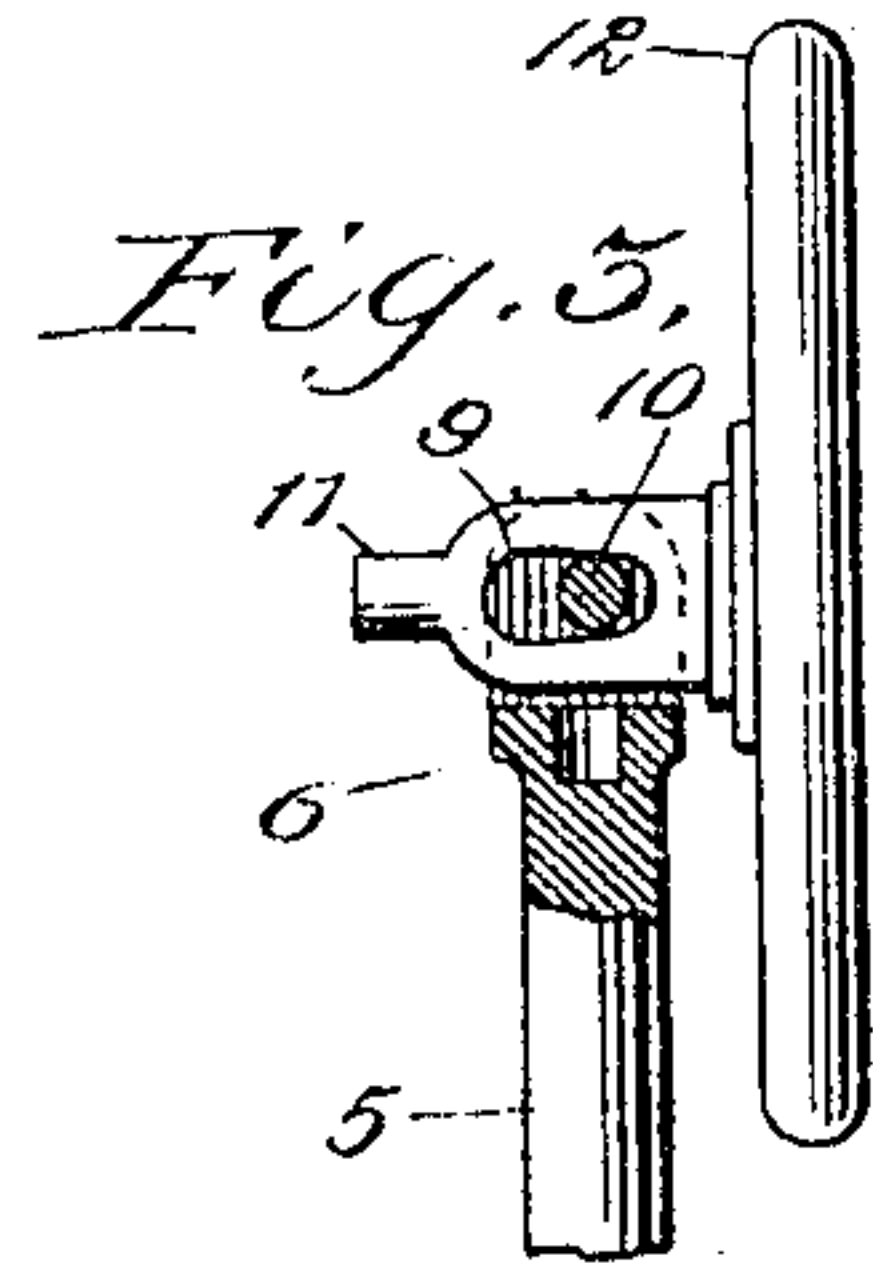
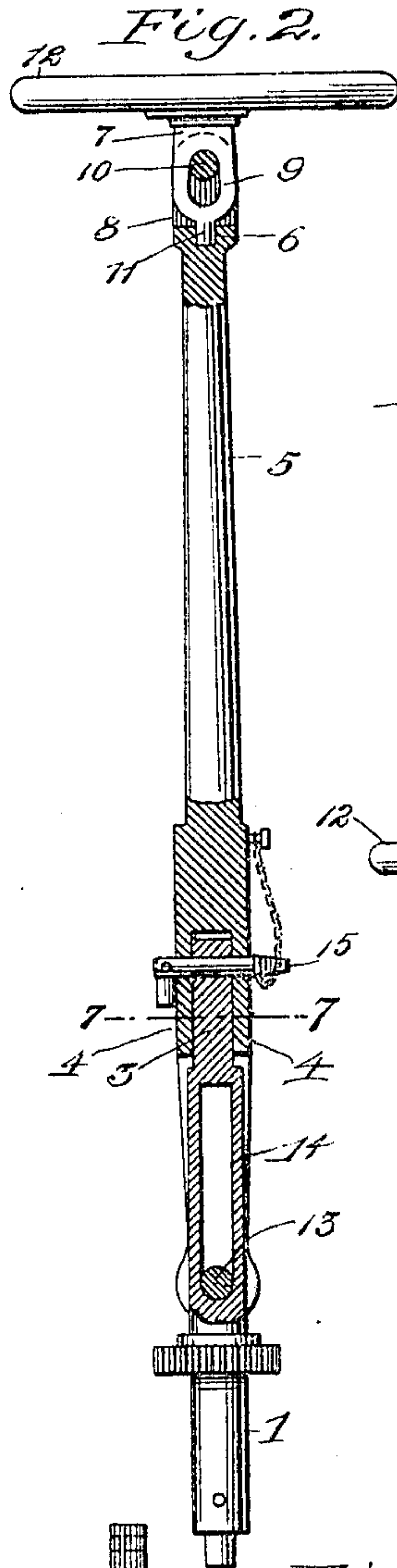
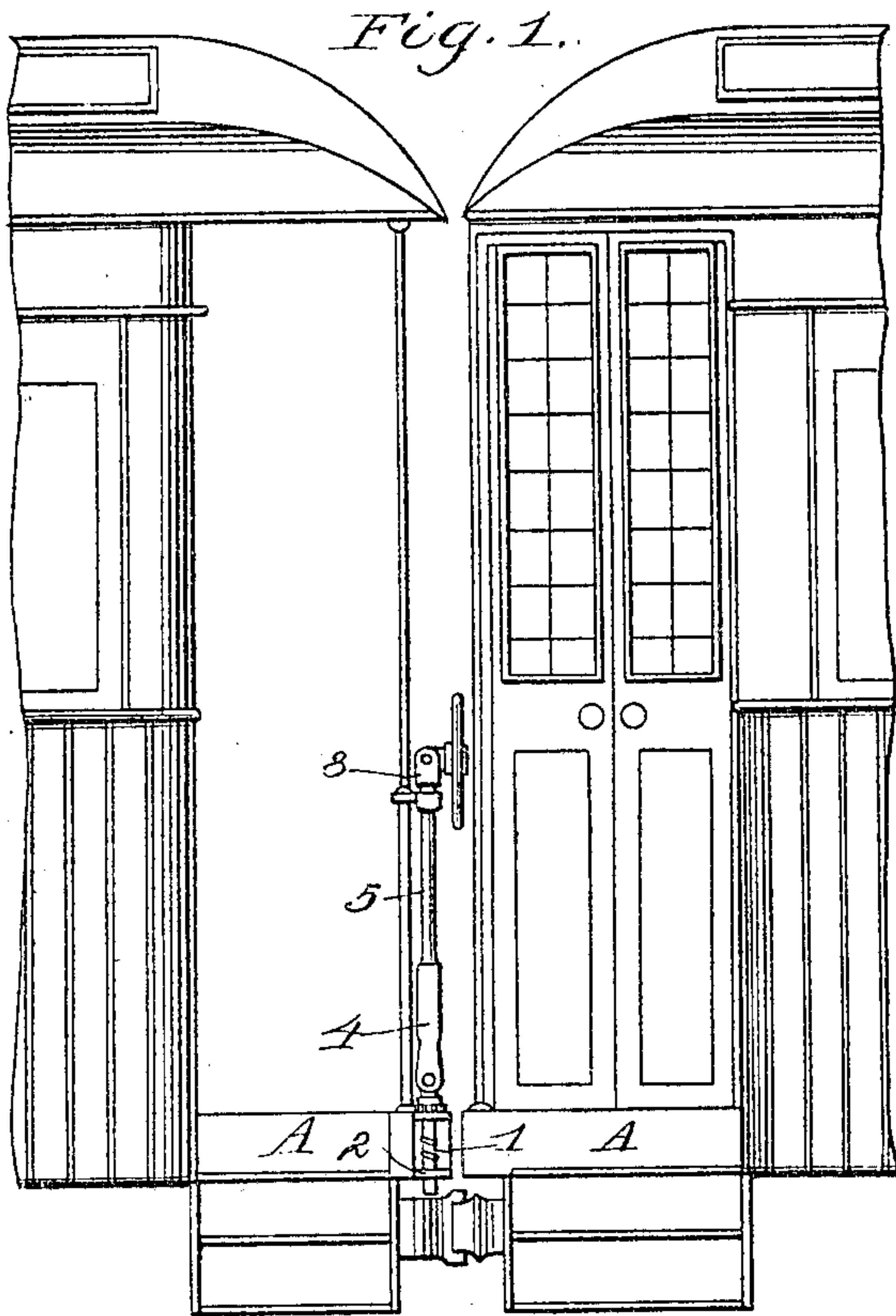


No. 799,144.

PATENTED SEPT. 12, 1905.

J. T. CLARK.
BRAKE STAFF.
APPLICATION FILED JUNE 29, 1905.



Witnesses;

W. B. Bunting
Harry W. Coffin

Inventor
James P. Clark

By Chas. E. Gordon
Att'y

UNITED STATES PATENT OFFICE.

JAMES THOMAS CLARK, OF HOUSTON, TEXAS, ASSIGNOR OF ONE-HALF
TO HENRY L. MEYER, OF NEW YORK, N. Y.

BRAKE-STAFF.

No. 799,144.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed June 29, 1905. Serial No. 268,005.

To all whom it may concern:

Be it known that I, JAMES THOMAS CLARK, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Brake-Staffs, of which the following is a full, clear, and exact specification.

This invention relates to brake-staffs employed in the hand braking systems of railway-cars.

In some sections of the country, particularly the Southwest, many of the railroads still retain the hand-brake, not only on freight-cars, but upon the day-coaches used on locals, and in the latter case with great cost, owing to the fact that the cars equipped with hand-brakes are almost daily coupled with through-cars of the vestibule type, in which case the hand-wheel of the one car must be removed to avoid crushing the vestibule of the adjacent car. In thus removing the hand-wheel the common practice is to throw it on the ground or insecurely fasten it to the car-body, where it is lost so far as the road is concerned, as it may be picked up and sold for junk or left to rust and become useless to any one. The development of the lumber traffic has called serious attention to a further objection to the ordinary rigid brake-staff, inasmuch as lumber or timber of greater length than the flats or gondolas is offered for shipment, and the brake-staff interferes with the economical loading of the car or train. In this case the brake-staff is removed from one end of the flat and thrown to the ground beside the track to become junk, as in the case of the hand-wheel before mentioned.

One object of this invention is to avoid the expense incident to the loss of the brake wheels and staffs, and this is attained by my novel brake-staff hereinafter set forth, and illustrated in the accompanying drawings.

With this and other objects in view the invention consists of the novel features of construction hereinafter described, and particularly set forth in the appended claims.

Referring to the drawings, wherein similar characters of reference are used to indicate corresponding parts in each of the several views, Figure 1 represents in side elevation the adjacent ends of a vestibule-car and an ordinary car in juxtaposition, the latter fitted with my improved brake-staff. Fig. 2 is a view, partly in section, illustrating my improvement.

Fig. 3 is a detail, partly in section, of the upper end of the staff, the hand-wheel being in position for coupling with a vestibuled car. Fig. 4 illustrates the staff in elevation, the position being at right angles to the view in Fig. 2. Fig. 5 is a top plan view of my brake-staff as applied to a flat, showing it in its folded position. Fig. 6 is an end view illustrating my brake-staff applied to a flat, and Fig. 7 is a sectional view on the line 7 7 of Fig. 2.

My improved brake-staff is made in three sections, the lower one 1 being, as usual, stepped at its lower end in any suitable bearing 2 and having a suitable bearing on the front sill or platform, whether it be a passenger or a freight. The lower section 1 of the staff is relatively short and terminates just above the car-platform A in an angular cross-sectional, preferably squared, stud 3 to receive the similarly-shaped socket 4 of the middle or main section 5 of the staff. This main section 5 is at its upper end bifurcated and provided with a socket 6, the wheel-spindle 7 being pivoted between the legs 8 of the upper end of the section 5. The wheel-spindle 7 is formed with a flattened lower end fitting snugly and being pivoted between the upper legs 8 of the section 5, said flattened end being provided with an elongated downwardly-tapered slot 9, engaging a through-bolt 10, carried by said upper legs of the section 5. Below the tapered slot 9 the wheel-spindle 7 is provided with a stud 11 to engage the socket 6 of section 5, and at its upper end it is rigidly connected with a hand-wheel 12. The lower end of the section 5 is also bifurcated, its legs carrying at their lower ends a pivot-bolt 13, which passes through an elongated slot 14 in the lower section 1 of the staff, the upper end of said lower section 1 of the staff being squared or angular cross-sectionally, as at 3, to fit a correspondingly-shaped socket, as at 4, cross-sectionally in the lower end of section 5 of the brake-staff, as shown. These parts are perforated to receive a locking pin or key 15, which is preferably permanently attached to the staff by a chain or in any desired manner. As so constructed it is obvious that in coupling to a vestibule, as in Fig. 1, the wheel-spindle by a sharp pull upward may be freed in one direction from its bolt 10, so that it may be turned, as in Fig. 1, to admit of coupling with a vestibuled car

without discarding the hand-wheel. Moreover, in loading long lumber on flats it will be seen that the section 5 of the staff may be raised from the section 1 and folded upon or adjacent to the platform of a flat, whereby it may be brought instantly into service after the unloading of the long timber.

It is obvious, of course, that in use upon passenger-coaches the section 5 could be formed or made in one piece with the base-section 1, thus making a practically rigid staff. Also in the use on flats or gondolas the wheel 12 may or may not be secured permanently to the upper end of the brake-staff, as desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A brake-staff comprising a lower section having an elongated slot, a main section mounted on a pivot-bolt seated in said elongated slot of the lower section, and means for locking said sections together.

2. A brake-staff comprising a lower section having an elongated slot and an angular upper end, a main section mounted on a pivot-

bolt seated in the lower section, and means for locking said sections together.

3. A sectional folding brake-staff provided at its top with a hand-wheel adapted to be folded into a plane substantially parallel with the brake-staff, and at its lower end with an angular socket fitting the upper end of the lower section, and with legs carrying a pivot-pin, said lower section being provided with a vertical slot through which said pivot-pin is adapted to pass.

4. A sectional folding brake-staff, the main section being bifurcated at the top and provided with a pivot-pin, and the upper or hand-wheel section being flattened to fit the top of the main section and provided with a tapering slot engaging the pivot-pin of said main section.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES THOMAS CLARK.

Witnesses:

B. I. HOBBS,

W. A. PRICHARD.