

(No Model.)

2 Sheets—Sheet 1.

R. E. ZELLERS

WAGON BRAKE.

No. 253,906.

Patented Feb. 21, 1882.

Fig. 1.

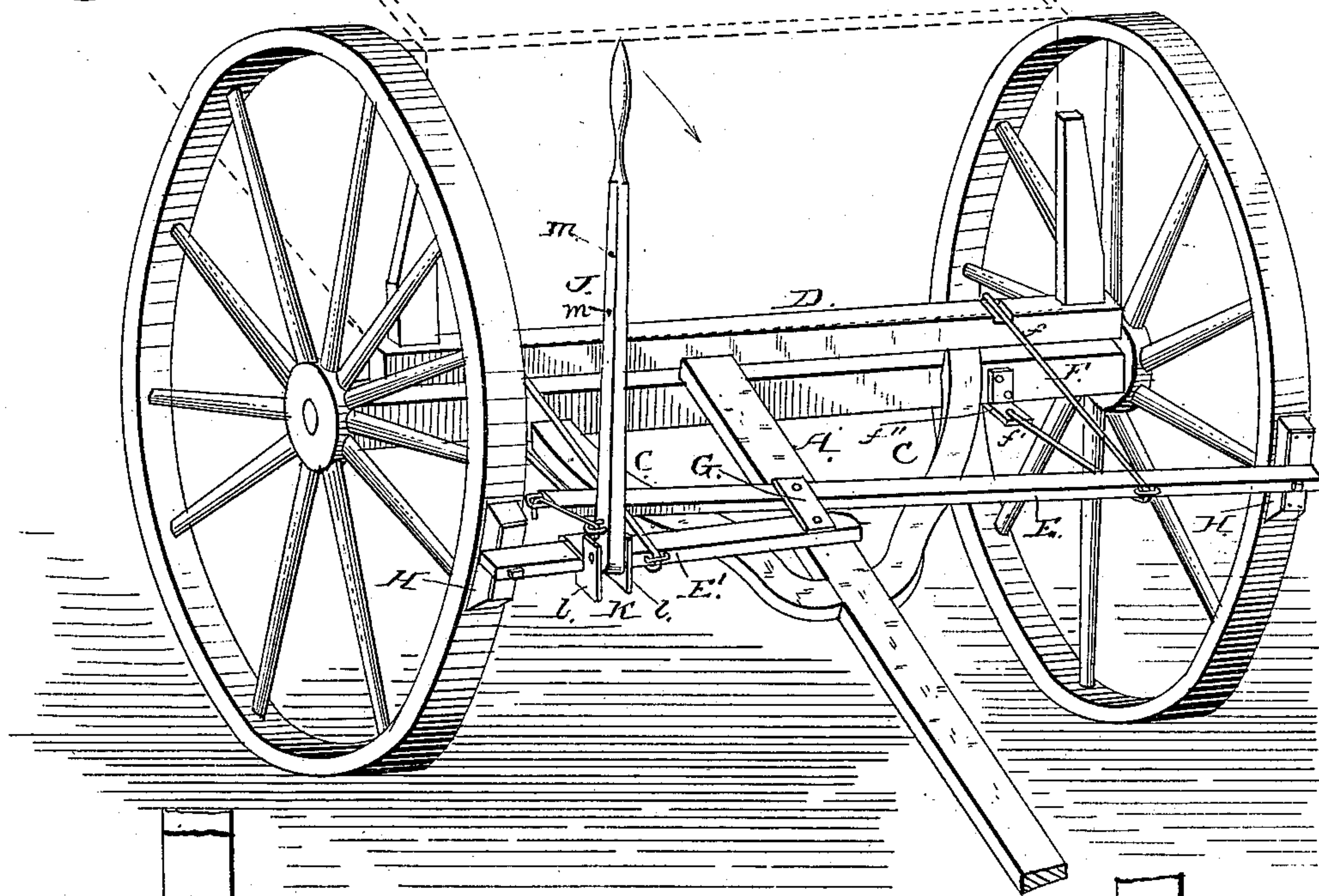
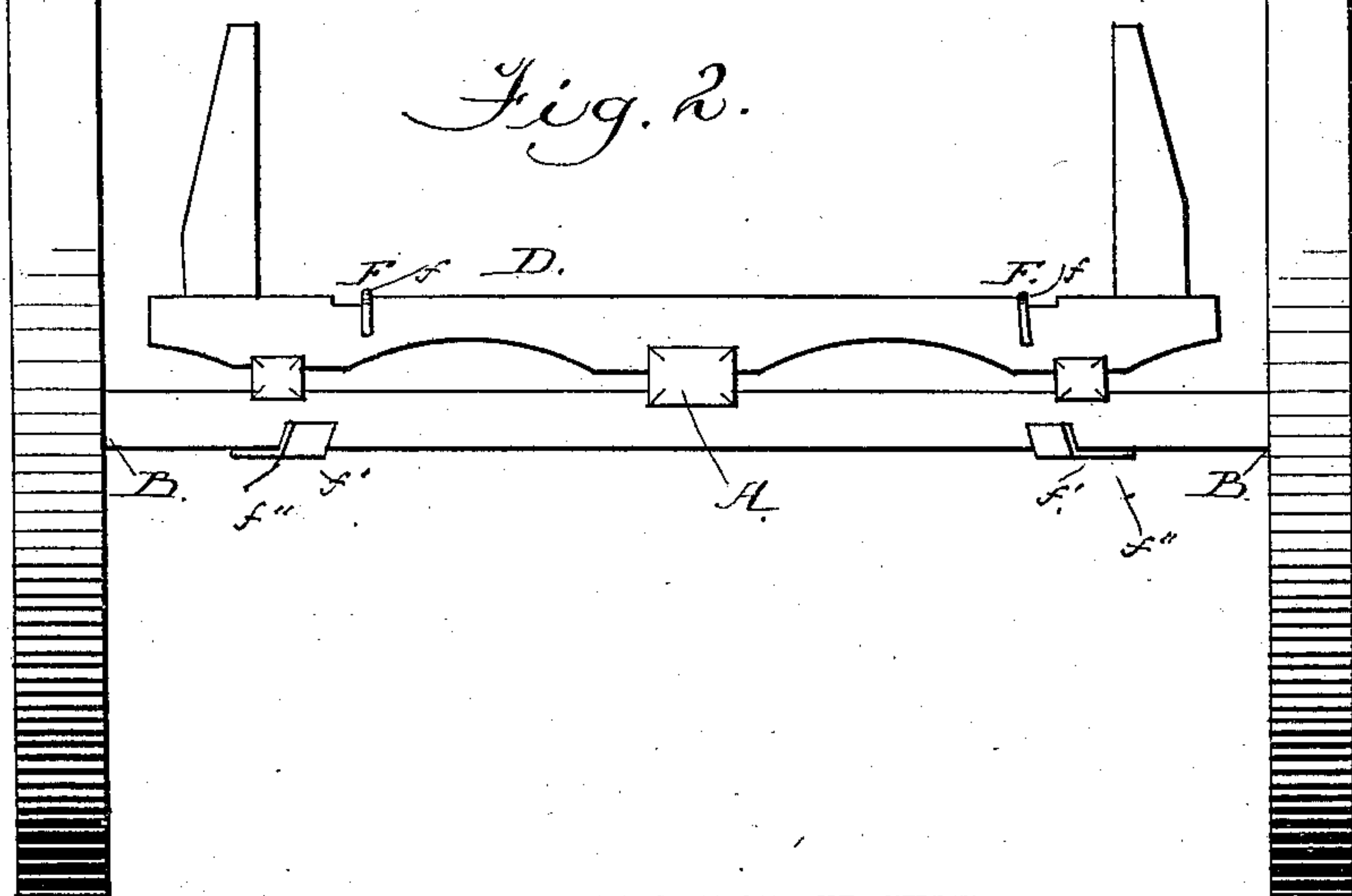


Fig. 2.



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Fig. 3.

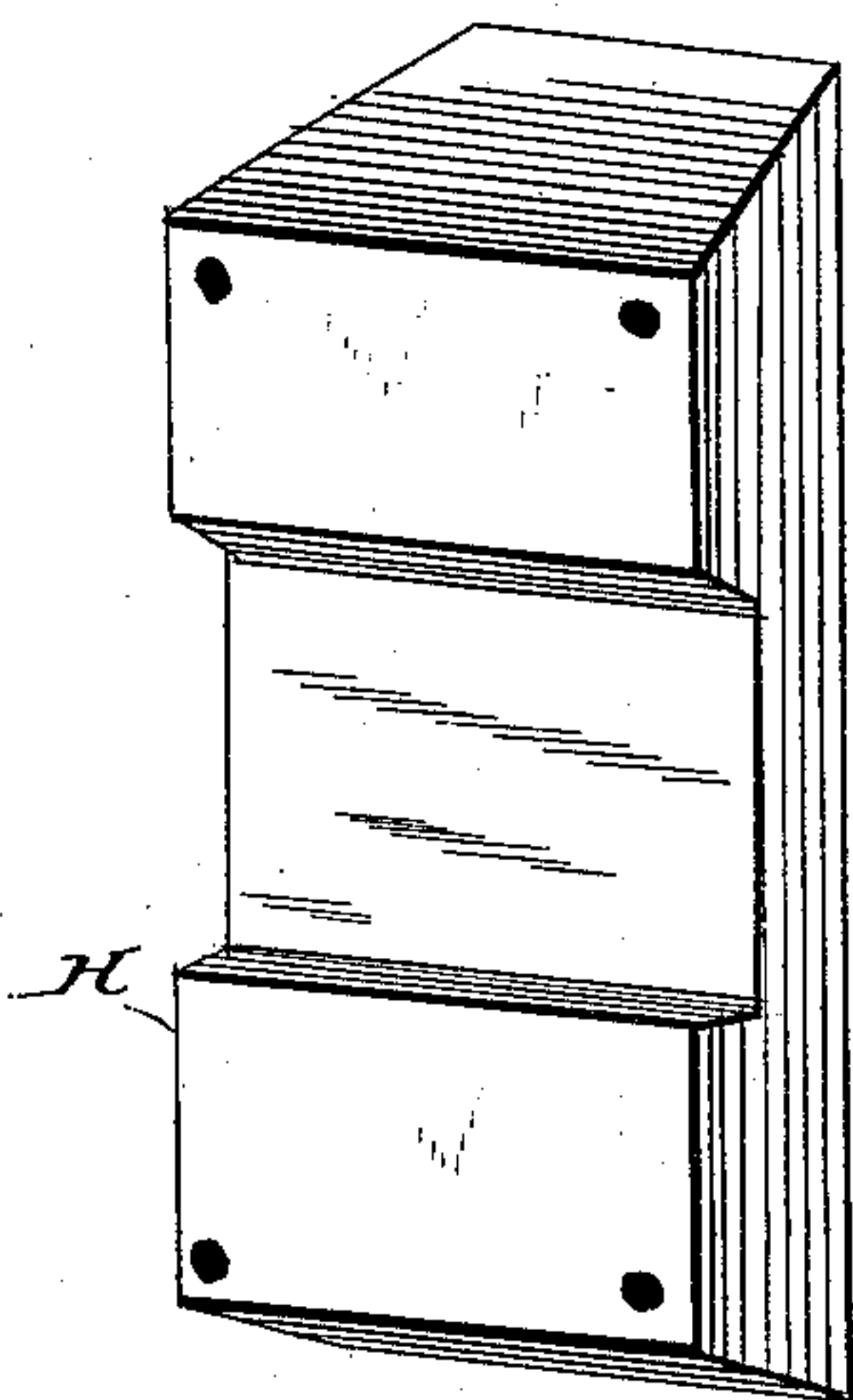


Fig. 4.

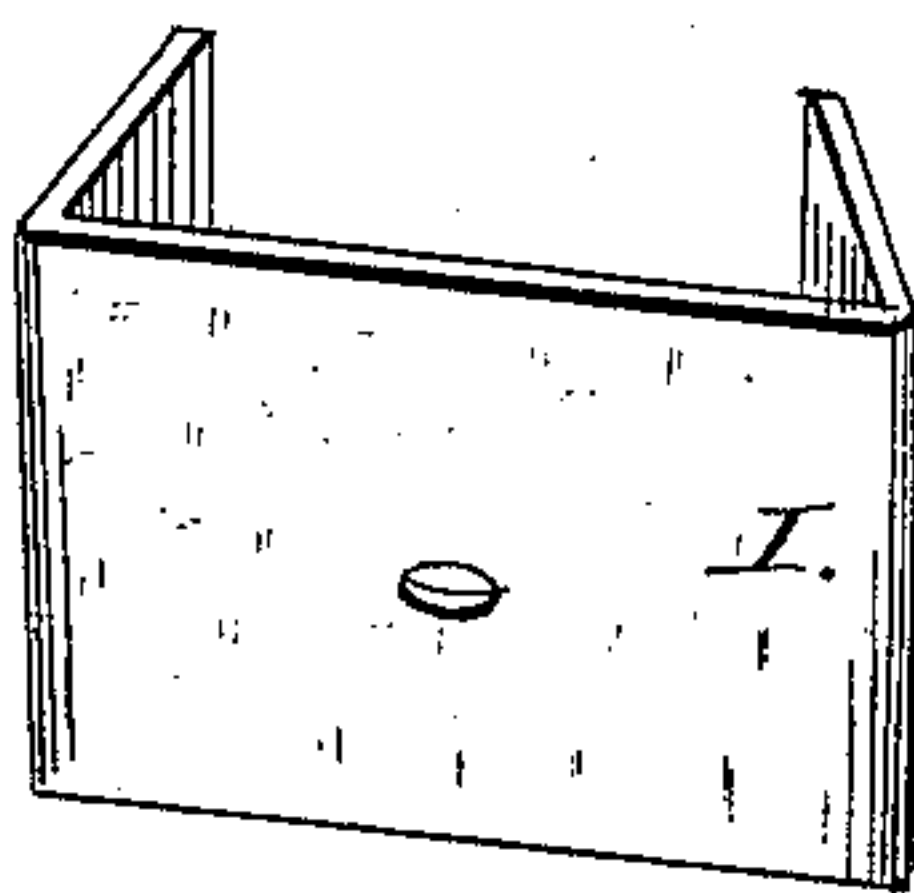


Fig. 5.

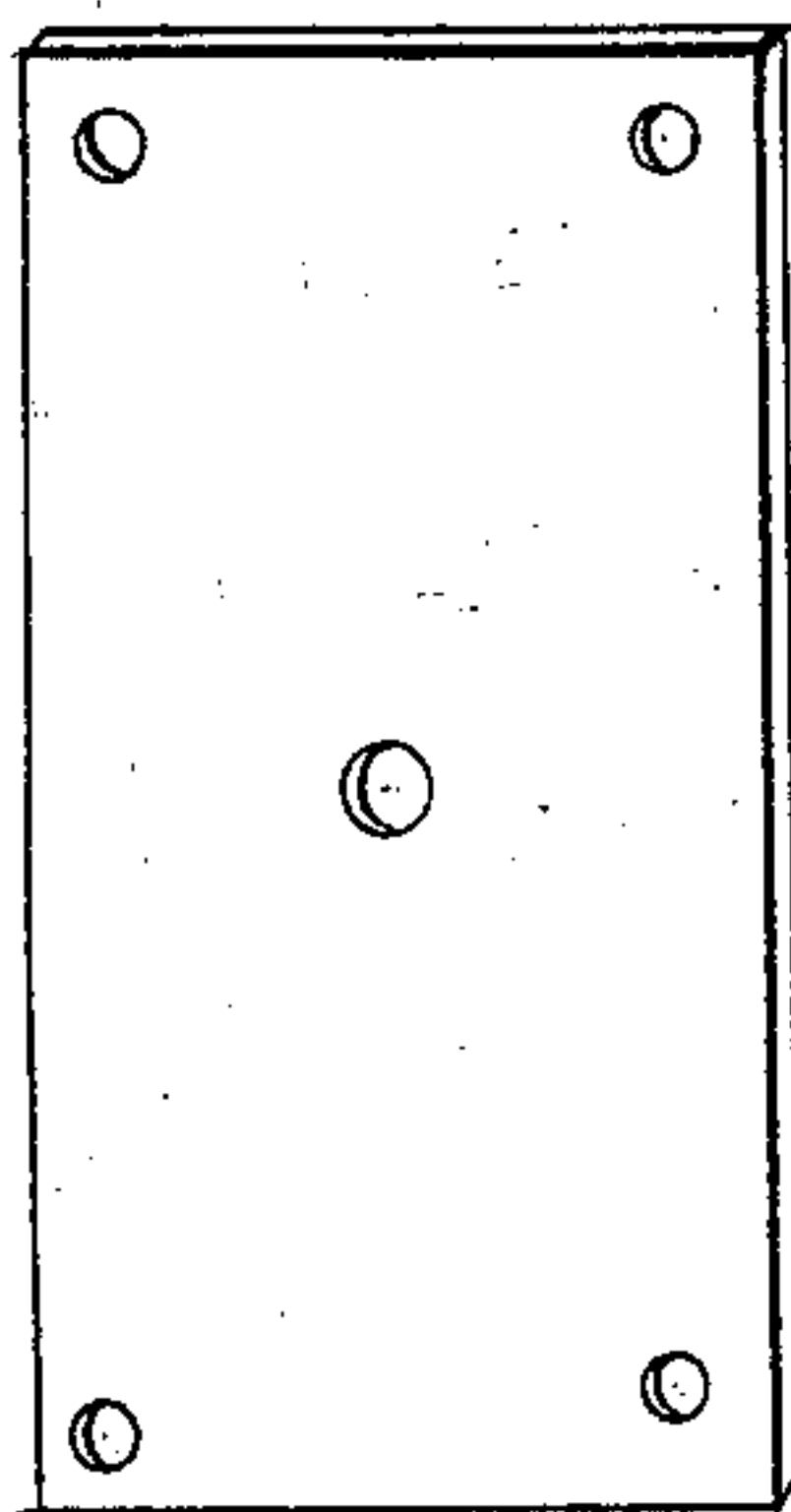


Fig. 7.

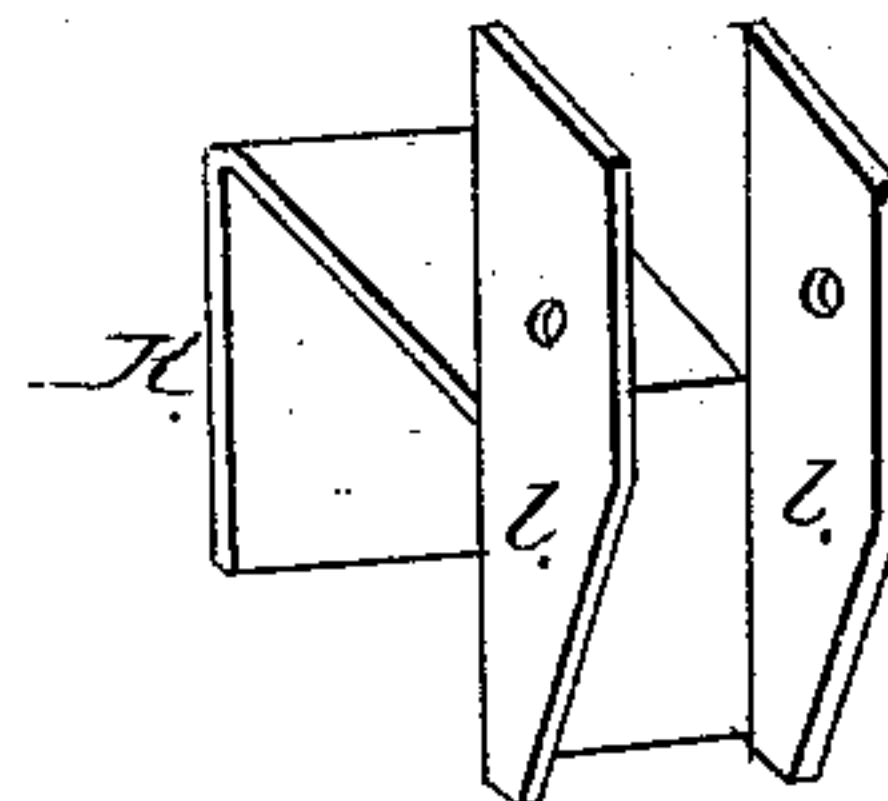
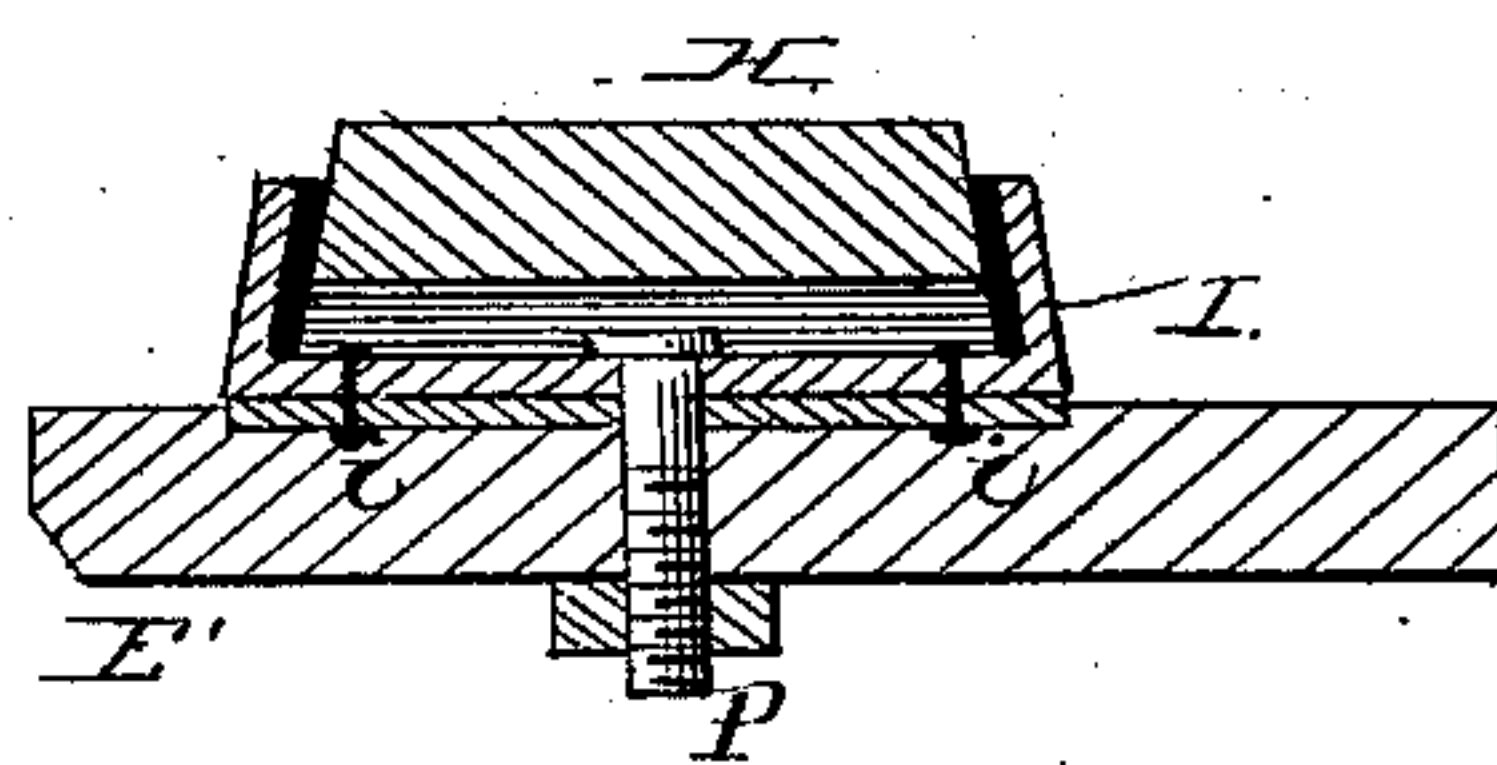


Fig. 6.



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UNITED STATES PATENT OFFICE.

ROBERT E. ZELLERS, OF DENISON, TEXAS.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 253,906, dated February 21, 1882

Application filed April 4, 1881. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. ZELLERS, of Denison, Texas, have invented a new and useful Improvement in Wagon-Brakes, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a wagon-brake with my improvements attached. Fig. 2 is a rear elevation of the same. Fig. 3 is a perspective view of one of the brake-blocks. Figs. 4, 5, 6, and 7 represent detail views of separate parts of my device.

My invention has reference to brakes used on wagons and other vehicles; and it consists in the combination of devices as hereinafter described and claimed.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A represents the coupling-pole of a wagon, B the axle, and C the hounds. The bolster D is secured in position in the usual manner over the axle B. Over the hounds C and the coupling A, I secure the brake-beams E E' by means of the iron rods F, which pass around the brake-beams, and which are secured, the upper ends, *f*, to the bolster and the lower ends, *f'*, to the axle. The upper portions of these iron rods F pass nearly horizontally to the rear and over the bolster and are bent down at right angles, by which construction a portion of the strain is transferred from the bolt to the bolster. The lower portions of these rods F are carried back at an angle and form braces for the upper portions, as shown in Fig. 1. These lower portions are also formed with shoulders *f''*, which rest against and are secured to the axle in front, thereby transferring a portion of the strain from the bolt to the axle. The brake-beam E passes entirely across from side to side, but the beam E' reaches only to the center of beam E, to which it is loosely secured by the clamp G, to which both beams are pivoted, as shown in Fig. 1. The short beam E' is provided on its inner end with a

beveled face which acts as a cam upon the beam E, and when power is applied to the vertical lever on the outer end of the short beam E' the latter acts as a lever to force the long beam E against the wheel. When the power is removed the beams assume their normal position. If round iron be used for rods F, they may be secured to the beams by staples; but if flat bars be used they may be bolted to the forward part of the beams.

To the outer ends of the beams are secured the brake-blocks H within the castings I, and these castings are secured by screw-bolts *i* to the beams. Between the brake-blocks and the castings I, I insert a piece of old leather or other similar article and fasten the whole by screwing up the nut P. By this means I tighten the block at pleasure.

To the outer end of brake-beam E', I pivot the lever J, by means of the casting K, provided with the two arms *l l*. The lever J is provided with two rings, *m m*, for the reception of a false lever, or with holes for the purpose of making connection with the brake-beam E and a lever on the side of the bed. (Not shown.) The lever J is not quite as high as the bed, and it is evident from its construction that it can be used at all times, with or without the bed. It is also evident that the brake-beam may be placed beneath the hounds and coupling without departing from the spirit of my invention.

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

1. The brake-beams E E', pivoted in the clamp G, in combination with the bent rods F, when constructed to operate substantially as and for the purpose set forth.

2. The brake-beams E E', pivoted to the clamp G, in combination with the bent rods F, castings I, brake-blocks H, and lever J, constructed substantially as and for the purpose described.

ROBERT EMANUEL ZELLERS.

Witnesses:

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J. M. COOK.