

No. 726,148.

PATENTED APR. 21, 1903.

W. R. DUNKEL.
END GATE FASTENER.
APPLICATION FILED FEB. 27, 1903.

NO MODEL.

Fig. 1.

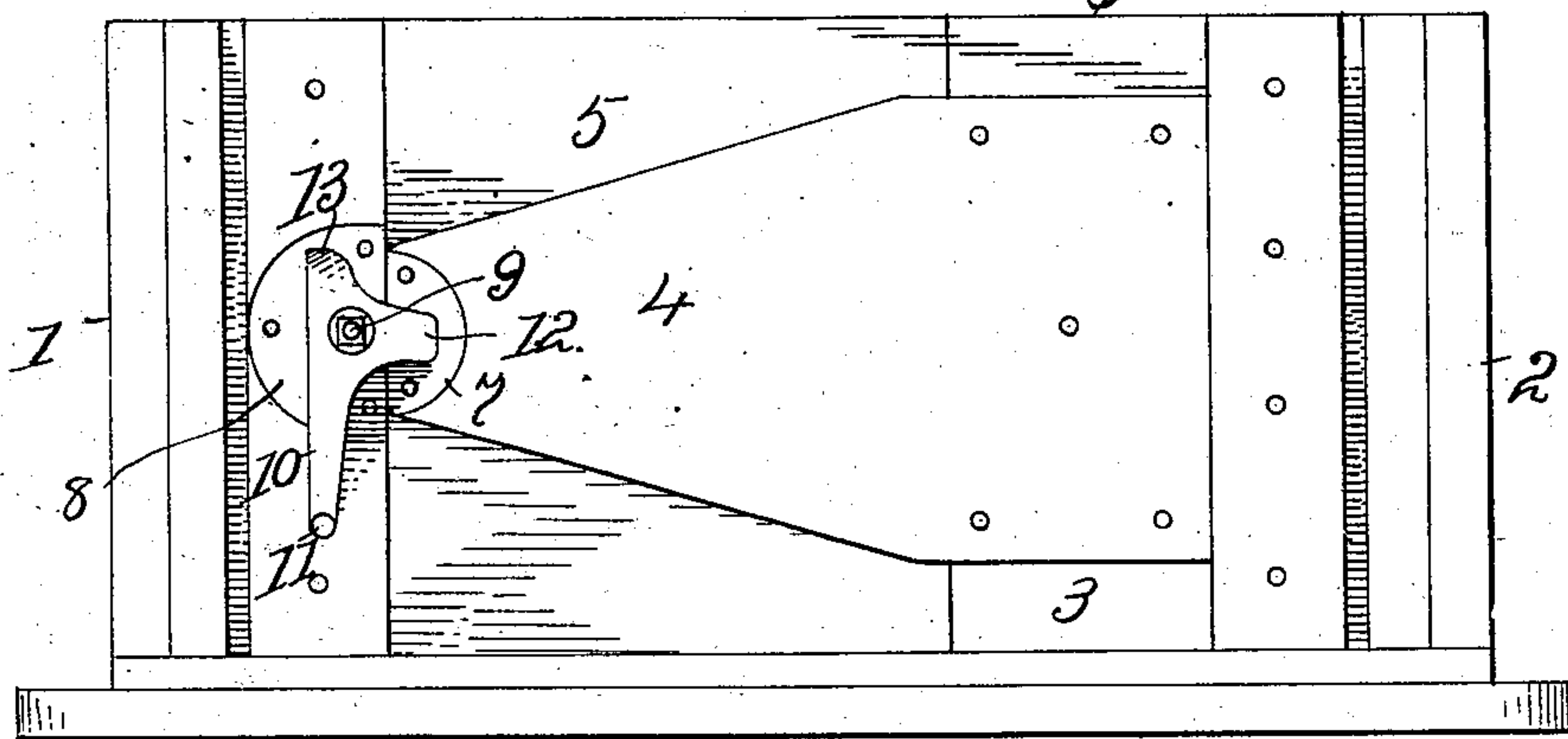


Fig. 2.

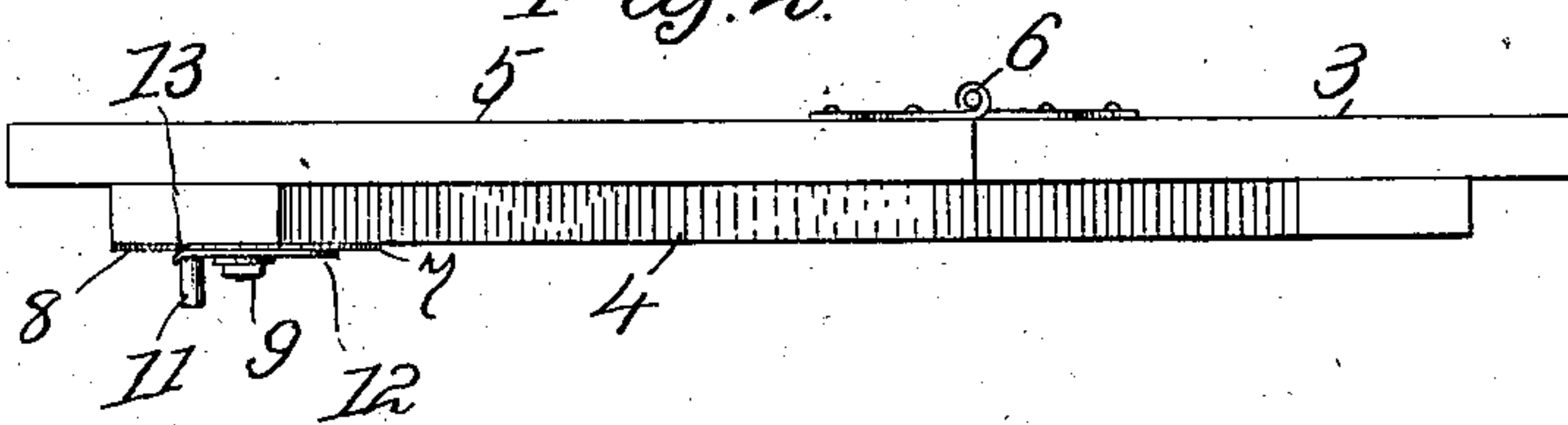
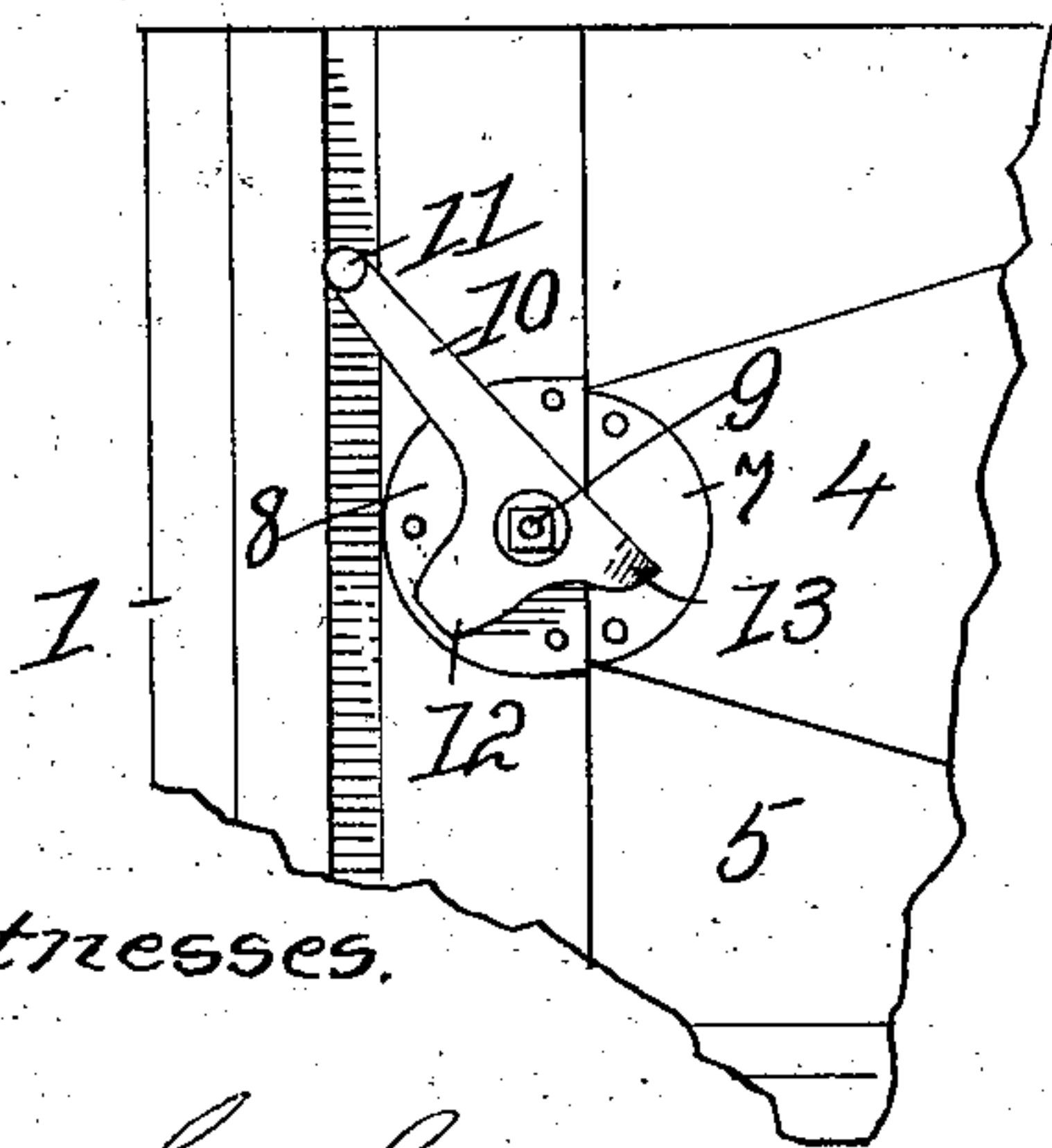


Fig. 3.

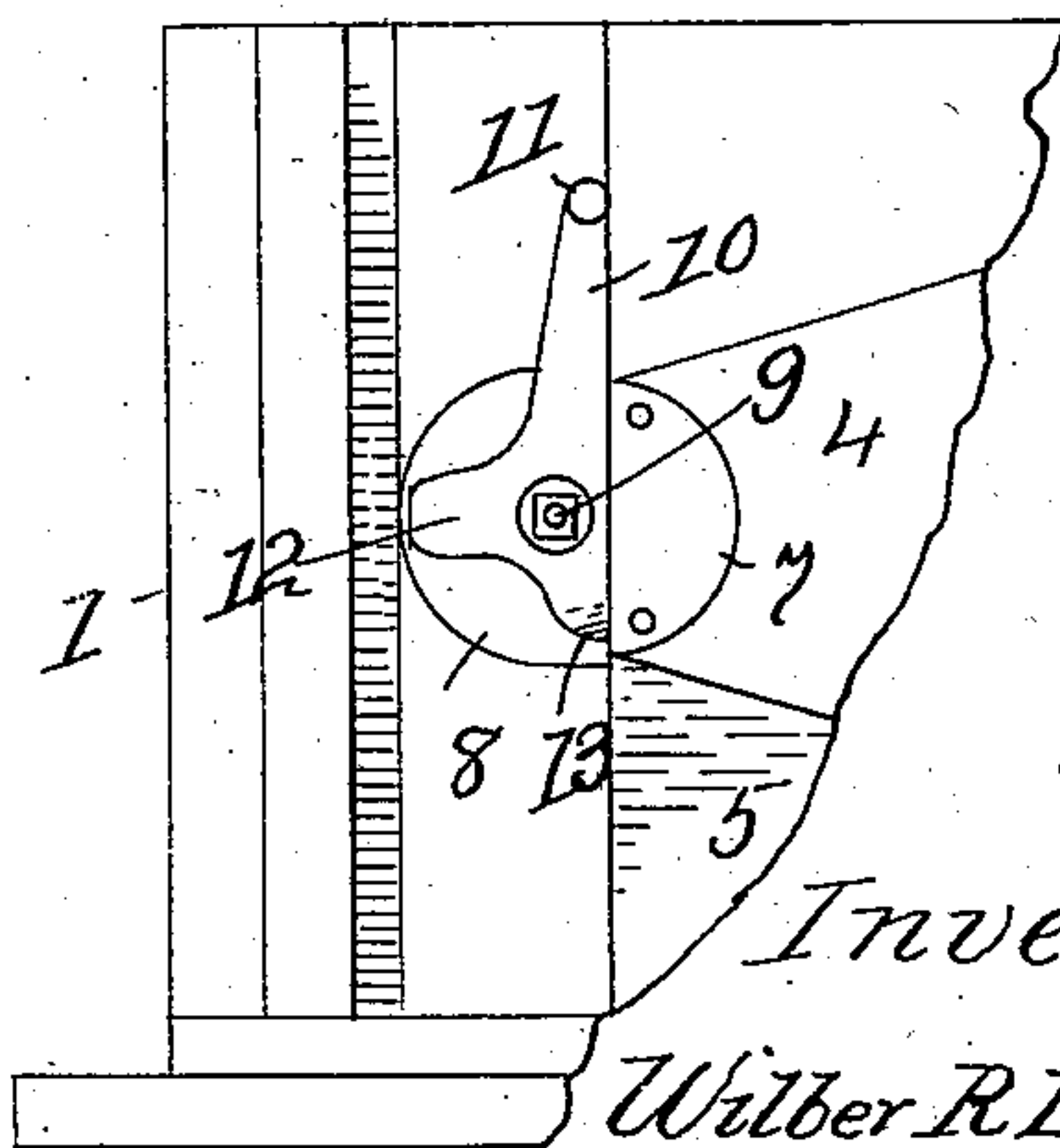


Witnesses.

Nora Graham.

Ina C. Graham.

Fig. 4.



Inventor.

Wilber R. Dunkel.

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UNITED STATES PATENT OFFICE.

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END-GATE FASTENER.

SPECIFICATION forming part of Letters Patent No. 726,148, dated April 21, 1903.

Application filed February 27, 1903. Serial No. 145,421. (No model.)

To all whom it may concern:

Be it known that I, WILBER R. DUNKEL, of the city of Pana, in the county of Christian and State of Illinois, have invented certain new and useful Improvements in End-Gate Fasteners, of which the following is a specification.

This invention relates to end-gates formed of two pieces hinged together, one of the pieces being provided with a flap or extension and the other part being provided with a fastening to engage the flap and hold the pieces in line.

The invention is confined to the peculiar construction of the fastening; and the object is to provide a simple and effective fastening that is easily manipulated and that will not jar loose.

The invention is exemplified in the structure hereinafter described and it is defined in the appended claims.

In the drawings forming part of this specification, Figure 1 is a rear elevation of a wagon-box, the end-gate whereof is constructed in accordance with my invention. Fig. 2 is a plan of the end-gate separate from the wagon-box. Fig. 3 is an end elevation of a fragment of the wagon-box and end-gate, showing how the fastener holds the gate locked under unusual and extreme circumstances. Fig. 4 is a rear elevation showing a fragment of the wagon-box and end-gate, showing the fastener in position to release the flap and permit the removal of the end-gate from the box.

The sides of the wagon-box are shown at 1 and 2. One piece of the end-gate is shown at 3, a flap or extension 4 is secured to piece 3, and piece 5 is secured to piece 3 by means of hinges 6. A metal plate 7 is attached to the extended end of flap 4 in any suitable manner, and a metal plate 8 is attached to a cleat on piece 5 adjacent to the end of the flap. The plate 8 has a boss on which a fastener 10 is pivoted, and a bolt 9 secures the fastener on its pivot. The fastener consists of the principal member 10, which is elongated and provided at its end with a lateral extension 11, a main lock extension 12, extending at approximate right angles with member 10, and an auxiliary lock extension 13 approximately in line with the principal member.

The lateral extension 11 acts as a weight to hold the fastener in a locked position, and it also provides a handle whereby the fastener may be turned and held in the position shown in Fig. 4. Whenever the fastener is in its normal position, as shown in Fig. 1, the main lock extension 12 extends across plate 7 and holds the pieces of the end-gate locked against swinging on hinges 6. When the wagon is loaded and there is pressure against the end-gate, the friction developed by pressure of plate 7 against lock extension 12 will hold the fastener in place. When the wagon-box is empty, the jar of the wagon, particularly on rough roads, will tend to swing the fastener from side to side. Ordinarily the extension 12 will keep in engagement with plate 7 as the fastener oscillates, and whenever the jar is sufficient to swing lock extension 12 from contact with the plate 7 the principal member 10 or the auxiliary lock extension 13 will engage plate 7 and hold the end-gate locked. Whenever the oscillation of the fastener becomes so violent as to throw the principal member 10 upward and past the pivot the auxiliary lock extension 13 will engage the plate 7, as shown in Fig. 2, and prevent the gate from swinging open. In reaching the position shown in Fig. 3 the fastener must pass the opening position shown in Fig. 4, and to facilitate such passage a nose of lock extension 13 is turned slightly outward, as shown in Fig. 2 and indicated by shaded lines in the other figures. This outward turn forms an incline that permits extension 13 to ride freely over plate 7 and permits the weighted end 11 to pass the dead-center before the gate has time to swing open.

The different parts may be modified somewhat in form and proportion without departing from the principal of my invention, and the plates 7 and 8 may be secured in place by various mechanical expedients, so that I do not restrict myself to the details shown and described beyond the terms of the claims.

I claim—

1. The combination in an end-gate composed of two pieces hinged together and an overlapping lock-flap on one of the pieces, of a fastener secured to the other piece of the end-gate adjacent to the end of the lock-flap and composed of a principal weighted mem-

ber, a main lock extension approximately at right angles with the main member and an auxiliary lock extension approximately in line with the main member, substantially as described.

2. The combination in an end-gate composed of two pieces hinged together and an overlapping lock-flap on one of the pieces, of a fastener secured to the other piece of the end-gate adjacent to the end of the lock-flap and composed of a principal weighted mem-

ber, a main lock extension approximately at right angles with the main member and an auxiliary, outwardly-curved, lock extension approximately in line with the main member, substantially as described.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

WILBER R. DUNKEL.

Witnesses:

E. M. HYBARGER,
GEORGE L. BALDWIN.