No. 737,624. PATENTED SEPT. 1, 1903.

J. M. HEDRICK.

EMERGENCY CAR BRAKE.

APPLICATION FILED JAN. 22, 1903.

NO MODEL.

Fig: 1

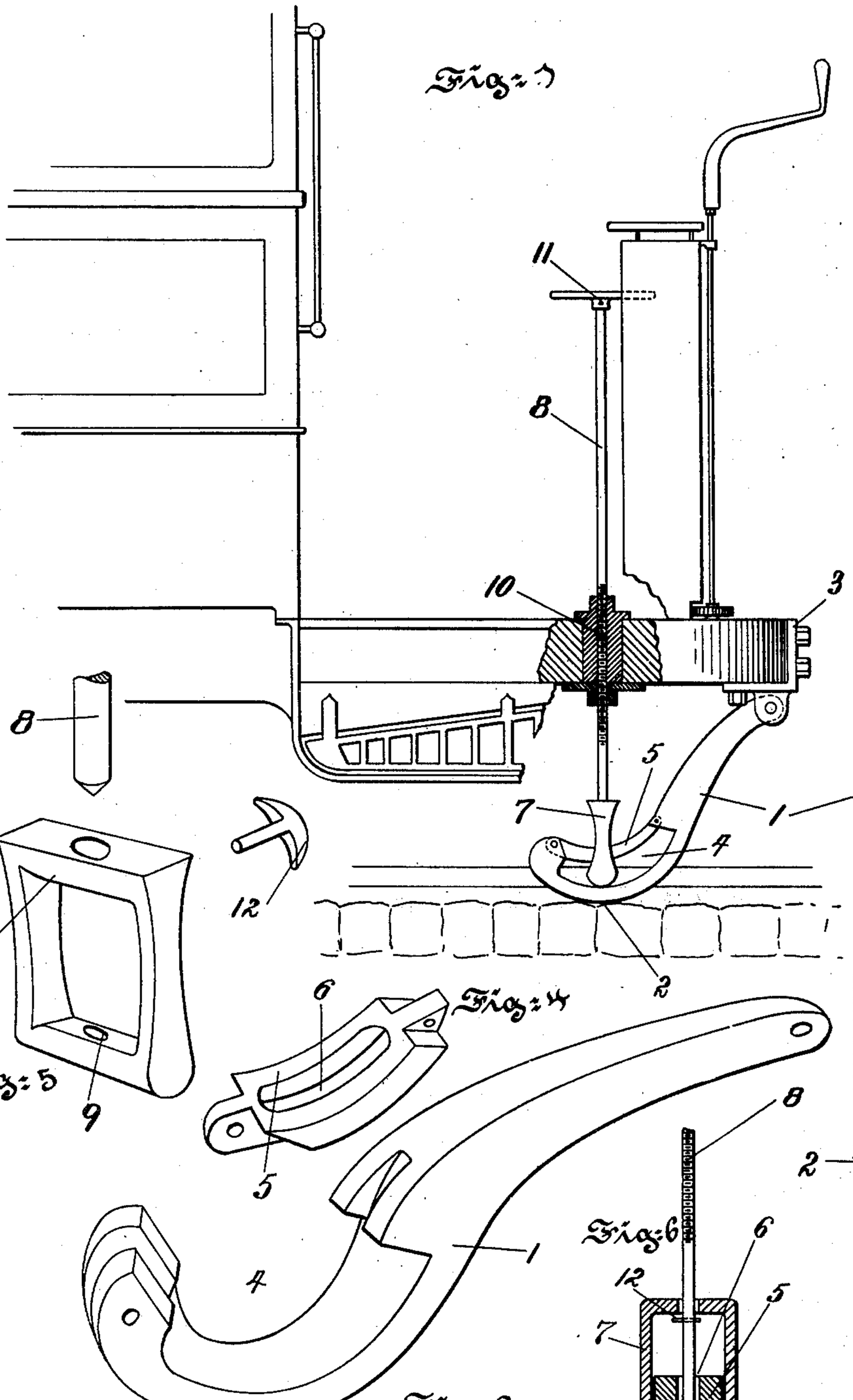

Fig: 3

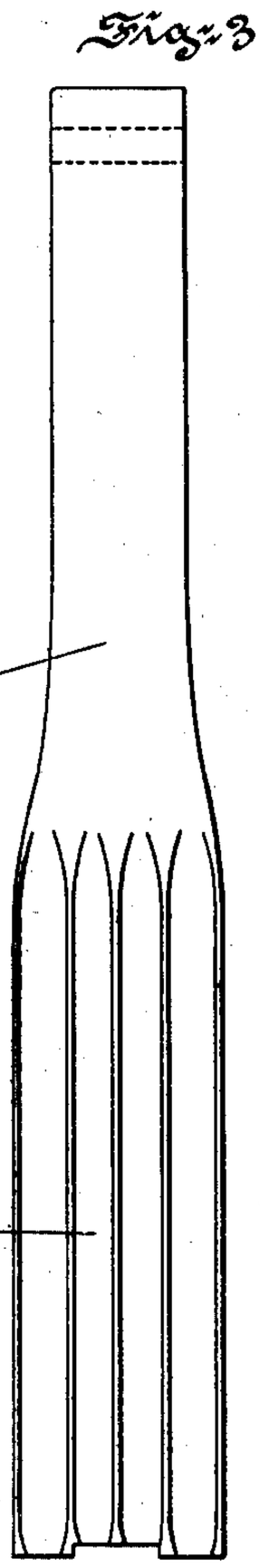

Fig: 5

Fig: 4

Fig: 6

Fig: 2

WITNESSES:

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K. M. Gilligan

INVENTOR.

John M. Hedrick.

BY

Augustus B. Stoughton.

ATTORNEY.

No. 737,624. Patented September 1, 1903.

UNITED STATES PATENT OFFICE.

JOHN M. HEDRICK, OF FLOURTOWN, PENNSYLVANIA.

EMERGENCY CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 737,624, dated September 1, 1903.

Application filed January 22, 1903. Serial No. 140,073. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. HEDRICK, a citizen of the United States, residing at Flourtown, in the county of Montgomery and State of Pennsylvania, have invented a new and useful Emergency Car-Brake, of which the following is a specification.

The object of the present invention is to provide for safely and satisfactorily stopping street and other cars in the event of failure of the ordinary brakes to work in an emergency or by reason of slippery tracks or for other causes.

To this and other ends hereinafter set forth the invention comprises the emergency car-brake to be presently described and finally claimed.

The nature, characteristic features, and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is an elevational view, partly in section, illustrating one end of a street-car provided with an emergency-brake embodying features of the invention. Fig. 2 is a perspective view of the brake-shoe. Fig. 3 is a plan view of the bottom of the brake-shoe, showing its corrugations. Fig. 4 is a perspective view of the key detached from the shoe. Fig. 5 is a perspective view illustrating the yoke, the operating-rod, and the fastening-pin in detached position; and Fig. 6 is a sectional view taken through the yoke-operating rod and shoe.

In the drawings, 1 is the brake-shoe. It is pivotally connected with the car and arranged to trail under the same. This shoe is arranged out of alinement with the track-rails and wheels of the car, so that in application its end or working face bears upon the roadway. As shown, the shoe comprises a shank provided with a curved working face 2, which may be corrugated in order to increase its frictional contact.

3 is a bracket which may be bolted to the buffer or other part of the framework of the car, and it is provided with devices by means of which the shoe is pivoted to it. There is in the shoe a slot 4, shown as closed by a removable key 5, having in it a slot 6. The lower end of the rectangular yoke 7 works in the slot 4, and the operating-spindle 8 passes through an opening in the top bar of the yoke 7 through the slot 6 in the key, and its end rests in a seat 9, formed on the bottom bar of the yoke 7. The operating-rod 8 is shown as threaded and in engagement with a threaded or tapped socket 10, suitably connected with the framework of the car.

11 is a wheel or other handle for turning the operating-rod 8. The parts may be assembled by removing the key 5 and placing the bottom bar of the yoke in the slot 4. The key is then pinned or otherwise secured to place, and the operating-rod 8 is passed through the hole in the top bar of the yoke and through the slot 6 into engagement with its seat 9. Provisions, as the pin 12, are then fitted to the operating-rod beneath the top bar of the yoke 7.

To apply the brake, the rod 8 is screwed downward, and it carries with it the yoke 7, of which the bottom bar presses upon the shoe and forces it into engagement with the ground or roadway, thus producing the braking effect. Inasmuch as the bottom bar of the yoke may slide in respect to the shoe, it follows that the turning of the shoe about its point of pivotal support does not force the operating-rod out of vertical position. Under normal conditions the operating-rod 8 is screwed up, so that the pin or connection 12 lifts the yoke, and with it the shoe 1, which is thus held clear of the ground and out of action.

It will be obvious to those skilled in the art to which my invention appertains that modifications may be made in detail without departing from the spirit thereof. Hence I do not limit myself to the precise construction and arrangement of parts hereinabove set forth, and illustrated in the accompanying drawings; but,

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

1. An emergency car-brake comprising a shoe arranged out of alinement with the car-wheels and pivoted at one of its ends to the front of the car so as to trail, and means including a screw having slot-and-pin connection with the shoe near its free end for holding the same clear of and for forcing it into

contact with the ground, substantially as described.

2. An emergency car-brake comprising a shoe provided on its under side with a lengthwise-corrugated working face and pivoted near one of its ends to the car so as to trail, and means for holding the free end of the shoe clear of and for forcing it into contact with the ground, substantially as described.

3. An emergency car-brake comprising a shoe pivoted to the front of the car and provided at its other end with a slot, a yoke having its bottom bar arranged in the slot, and means for raising and lowering the yoke, substantially as described.

4. An emergency car-brake comprising a brake-shoe pivoted to the front of the car and provided with a cut-away portion, a detachable slotted key for closing said cut-away portion to form a slot in the shoe, a yoke having its bottom bar arranged in the slot in the shoe and having its upper bar provided with an opening, an operating-rod passing through the opening in the top of the yoke and through the slot in the key and engaging the bottom bar of the yoke, and means connected with the operating-rod for engaging the yoke to lift it, substantially as described.

In testimony whereof I have hereunto signed my name.

JOHN M. HEDRICK.

In presence of—
W. J. JACKSON,
K. M. GILLIGAN.