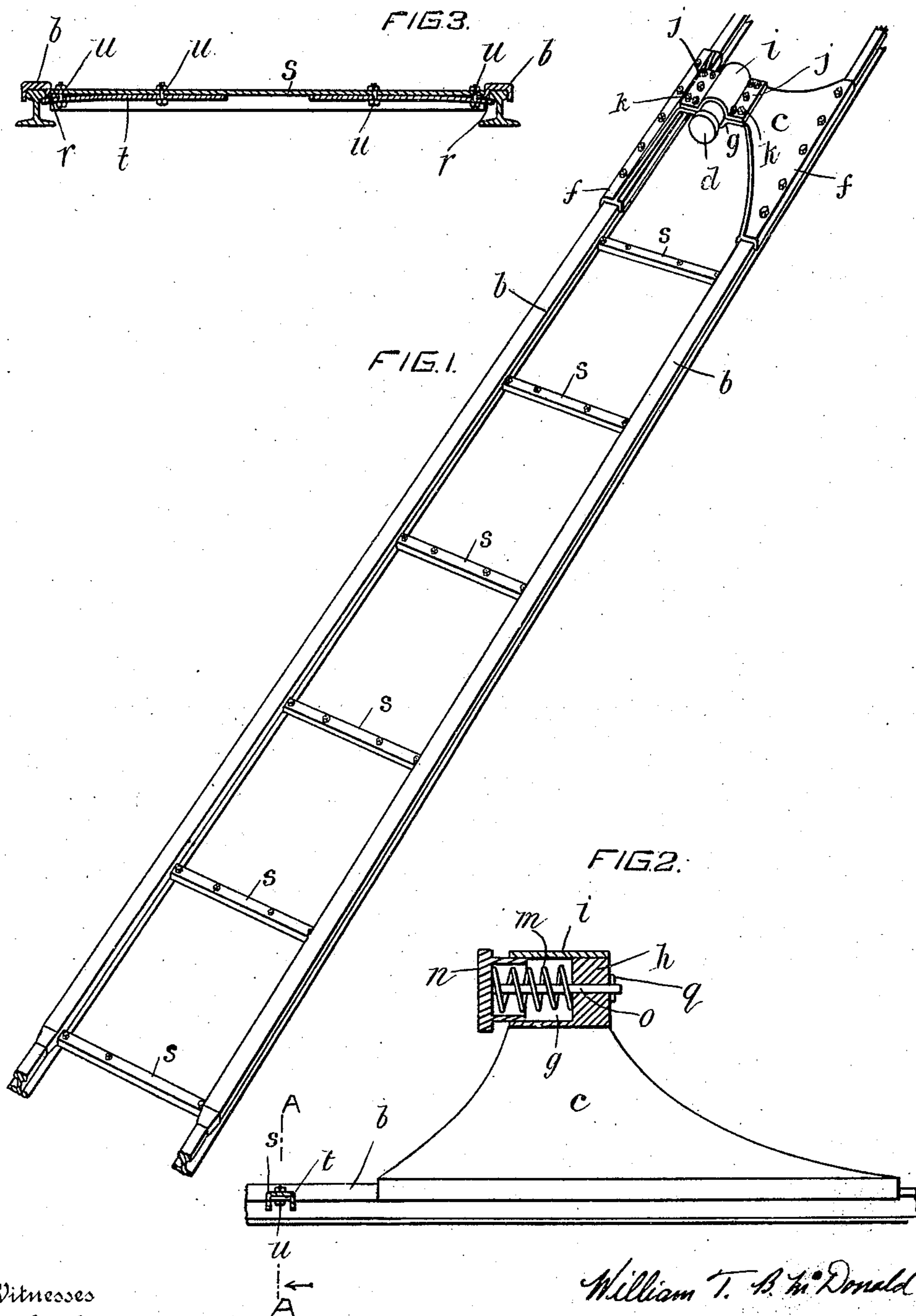


No. 847,357.

PATENTED MAR. 19, 1907.

W. T. B. McDONALD.
BUFFER.

APPLICATION FILED DEC. 30, 1904.



Witnesses

Ala Currie
Ed Peters

William T. B. McDonald
Inventor

By Attorney
Robt H. Mann

UNITED STATES PATENT OFFICE.

WILLIAM THOMPSON BROWN McDONALD, OF GRANBY, QUEBEC, CANADA,
ASSIGNOR OF ONE-HALF TO ROBERT GREENE, OF LONDON, CANADA,
AND ONE-HALF TO ALICE FLORENCE GREENE McDONALD, OF GRANBY,
CANADA.

BUFFER.

No. 847,357.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed December 30, 1904. Serial No. 239,059.

To all whom it may concern:

Be it known that I, WILLIAM THOMPSON BROWN McDONALD, of Granby, Province of Quebec, Canada, have invented certain new and useful Improvements in Buffers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates particularly to slidable railroad-buffers; and it has for its object to provide a slidable buffer capable of presenting greater resistance to the rolling-stock than has been possible heretofore in like appliances.

The invention may be said, briefly, to consist of a pair of slidable members adapted to rest upon the rails and to carry a buffer in a horizontal plane above the wheels of the rolling-stock and adapted to receive the impact of the latter and transmit it to the slidable members.

For full comprehension, however, of the invention reference must be had to the accompanying drawings, forming a part of this specification, and in which like symbols indicate the same parts, and wherein—

Figure 1 is a perspective view of my improved slidable buffer ready for action; and Fig. 2 is a longitudinal vertical sectional view thereof, taken on a line extending through the middle. Fig. 3 is a transverse vertical sectional view taken on line A A, Fig. 2.

The preferred embodiment of my invention consists of a pair of longitudinal members *b b* of substantially channel form, having bolted thereto near one end a bracket *c*, supporting a yielding buffer *d* about on a level with the lower portion of each end of locomotives and freight and other cars.

The bracket is preferably cast with a flange *f* at each end and a longitudinal depression *g* of semicircle form, which terminates at its rear end in an abutment-block *h*. A semicircular plate *i*, having flanges *j* along its sides, is secured, through its flanges by bolts *k*, to the middle portion of the bracket in position to cover the depression *g* and form therewith a cylinder having one end closed by the block *h*.

A buffer carried by the bracket and consisting of an expansible helical spring *m* is located in the cylinder, its outer end bearing in a cupped piece *n*, slidably mounted in the outer end of such cylinder, and a rod *o*, car-

ried rigidly by the inner end thereof, projects through a boring *p* in the block *h*, through which its movement in one direction is limited by a split cotter-pin *q*.

The longitudinal members *b b* have lugs *r* struck out from their adjacent sides, to which a series of braces *s* are bolted, the whole being locked to the rails by bars *t*, adjustably secured to the under sides of the braces *s* by bolts *u* and adapted to be projected beneath the heads of the rails, in which positions they are secured by such bolts.

The position of the point of my improved device upon which impingement takes place causes the weight of the body of the locomotive or the like coming in contact therewith to be transmitted directly to the longitudinals, and owing to the greater incline of the forward portion of the bracket such weight will be distributed over a greater track area.

What I claim is as follows:

1. A railroad-buffer adapted to have the rolling-stock ride upon the same and consisting of a member resting permanently slidably upon the rails, such member supporting a buffer proper on a level with the body of the rolling-stock, and means bracing the said buffer against the shock of the rolling-stock.

2. A slidable railroad-buffer consisting of a member comprising a pair of longitudinals resting permanently slidably upon the rails, a bracket secured rigidly to one end of the said members and projecting upwardly to a point on a level with the body of the rolling-stock and to a point in a vertical line a short distance from the said end, means securing a buffer proper to the said bracket, and means bracing the bracket against shock from the rolling-stock.

3. A slidable railroad-buffer consisting of a member comprising a pair of longitudinals adapted to rest slidably upon the rails and means secured rigidly to the said members and projecting upwardly to a point on a level with the body of the rolling-stock and in vertical line with a point a short distance from the said end, such means supporting a buffer at its upper end and means bracing the said buffer against the shock of the rolling-stock.

4. A slidable railroad-buffer consisting of a member comprising a pair of longitudinals adapted to rest slidably upon the rails and a bracket secured rigidly to one end of the

said members and projecting upwardly to a point on a level with the body of the rolling-stock, such bracket being formed at its upper end with a cylinder, having one end closed, a
5 slidable block located in the opposite end and a spring bearing between such closed end and the slidable block.

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

WILLIAM THOMPSON BROWN McDONALD.

Witnesses:

J. L. DOZIRS,

GEO. T. DORIM.