

No. 619,013.

Patented Feb. 7, 1899.

C. M. DISSOSWAY.
INSET RAILWAY RAIL.

(Application filed July 21, 1898.)

(No Model.)

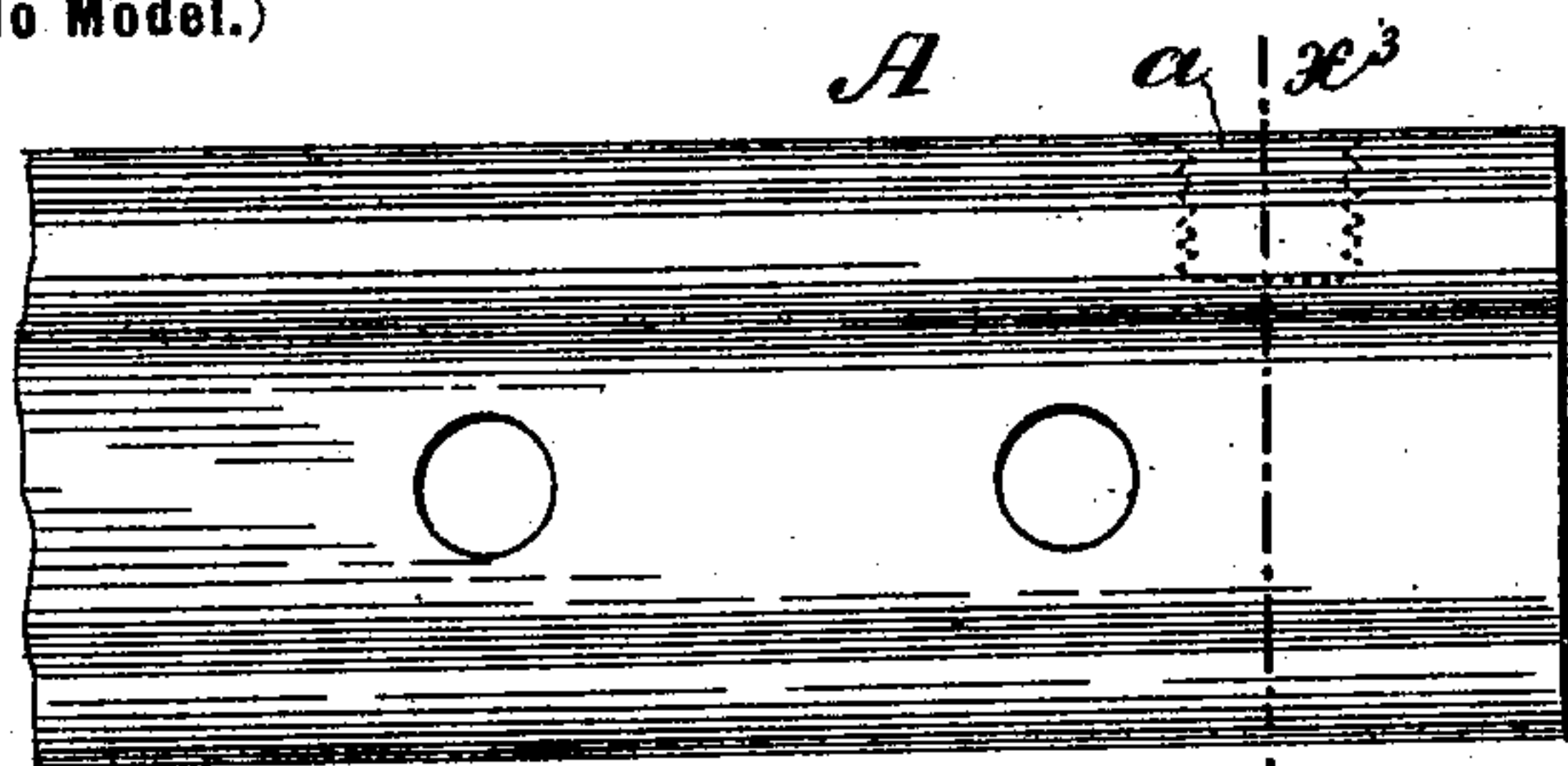


Fig. 1.

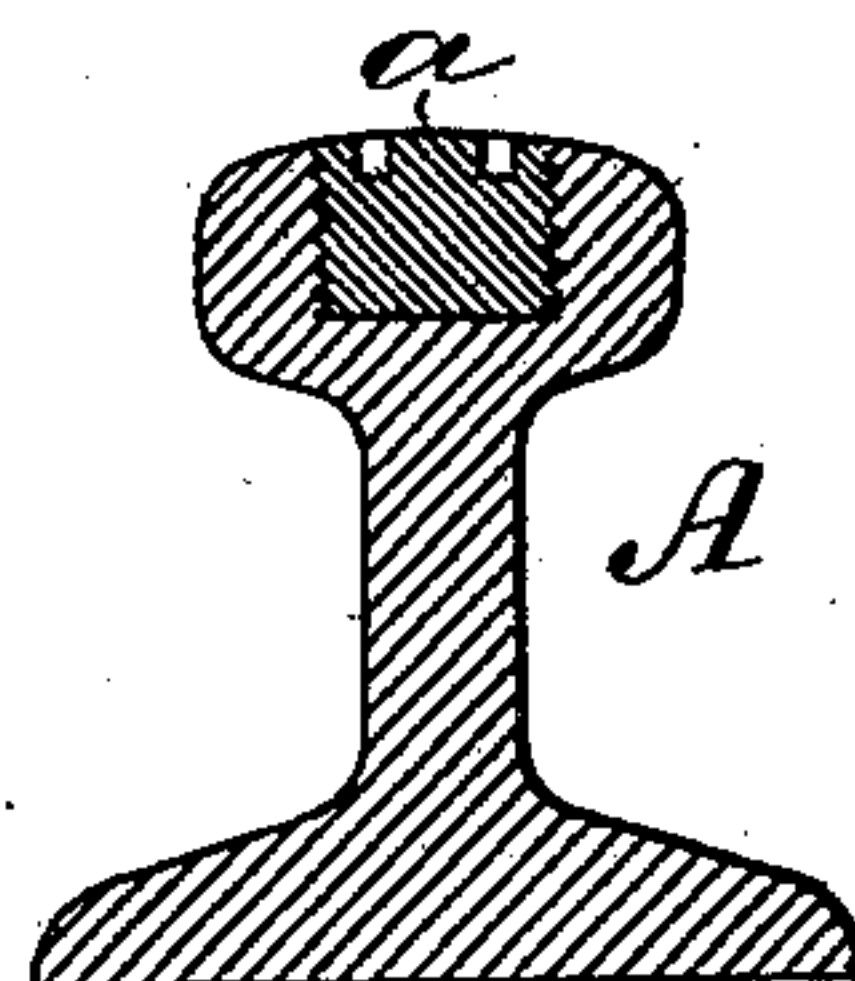


Fig. 3.

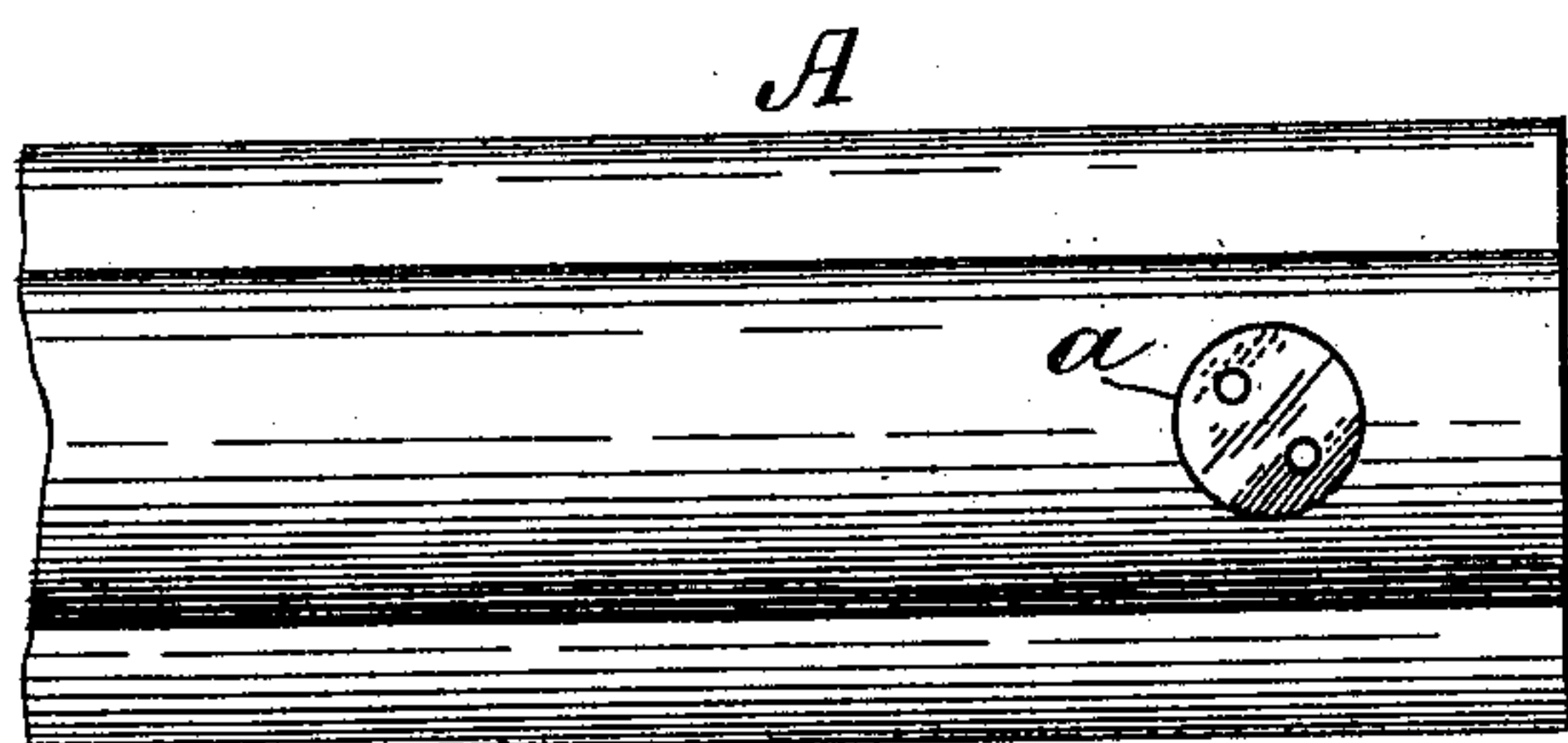


Fig. 2.

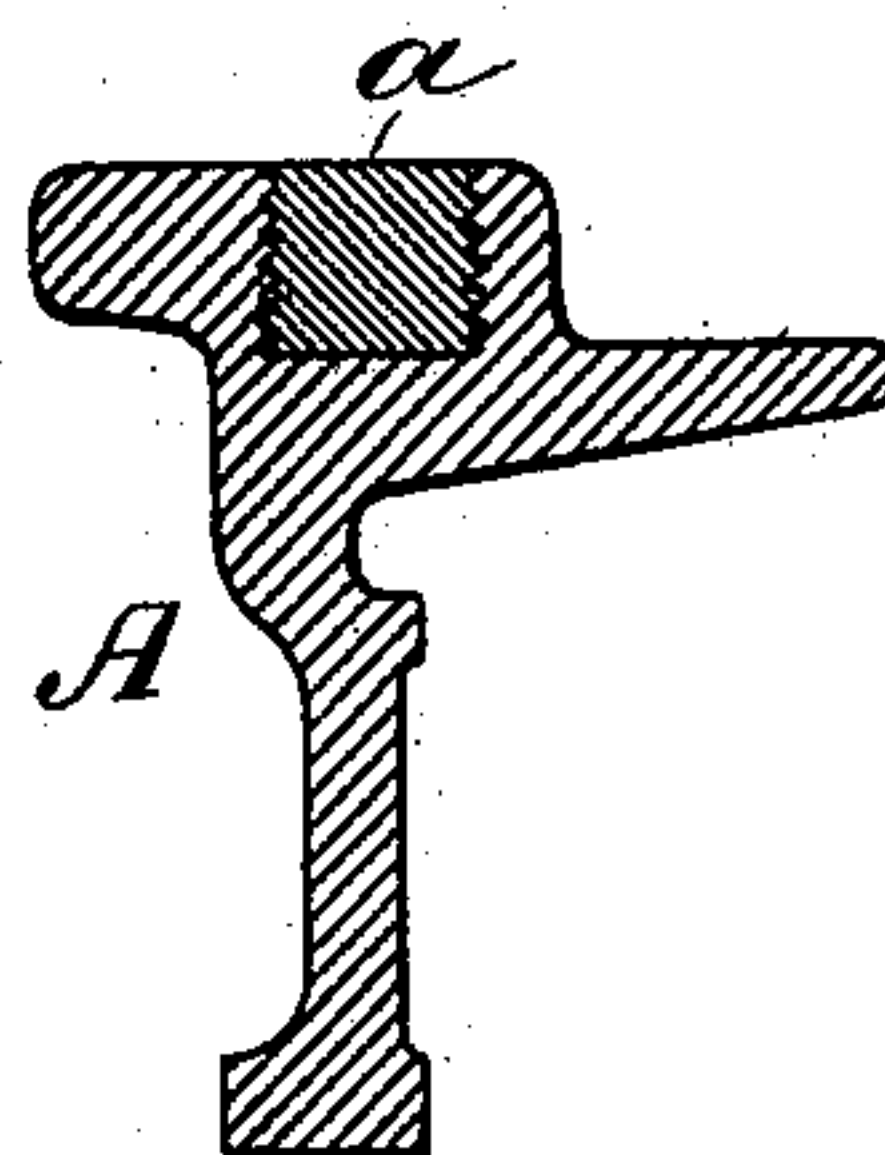


Fig. 4.

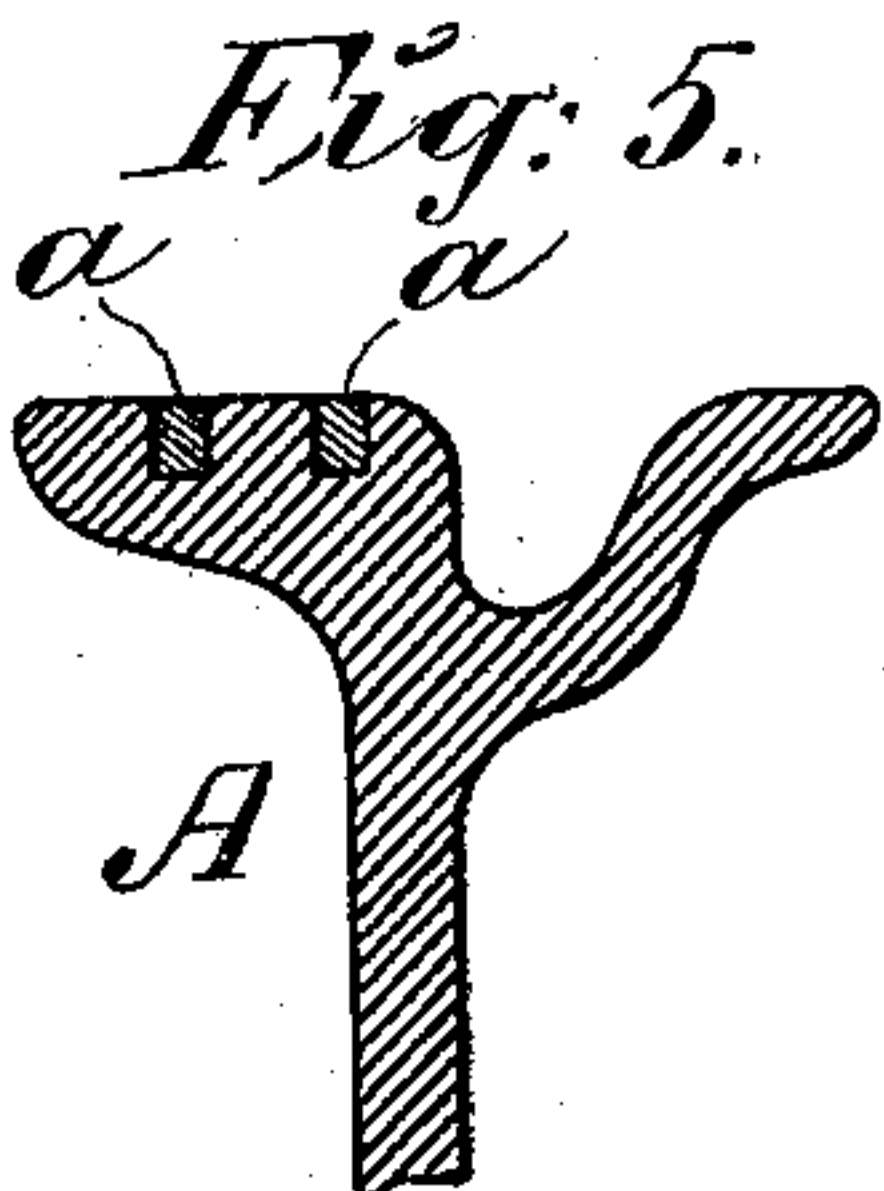
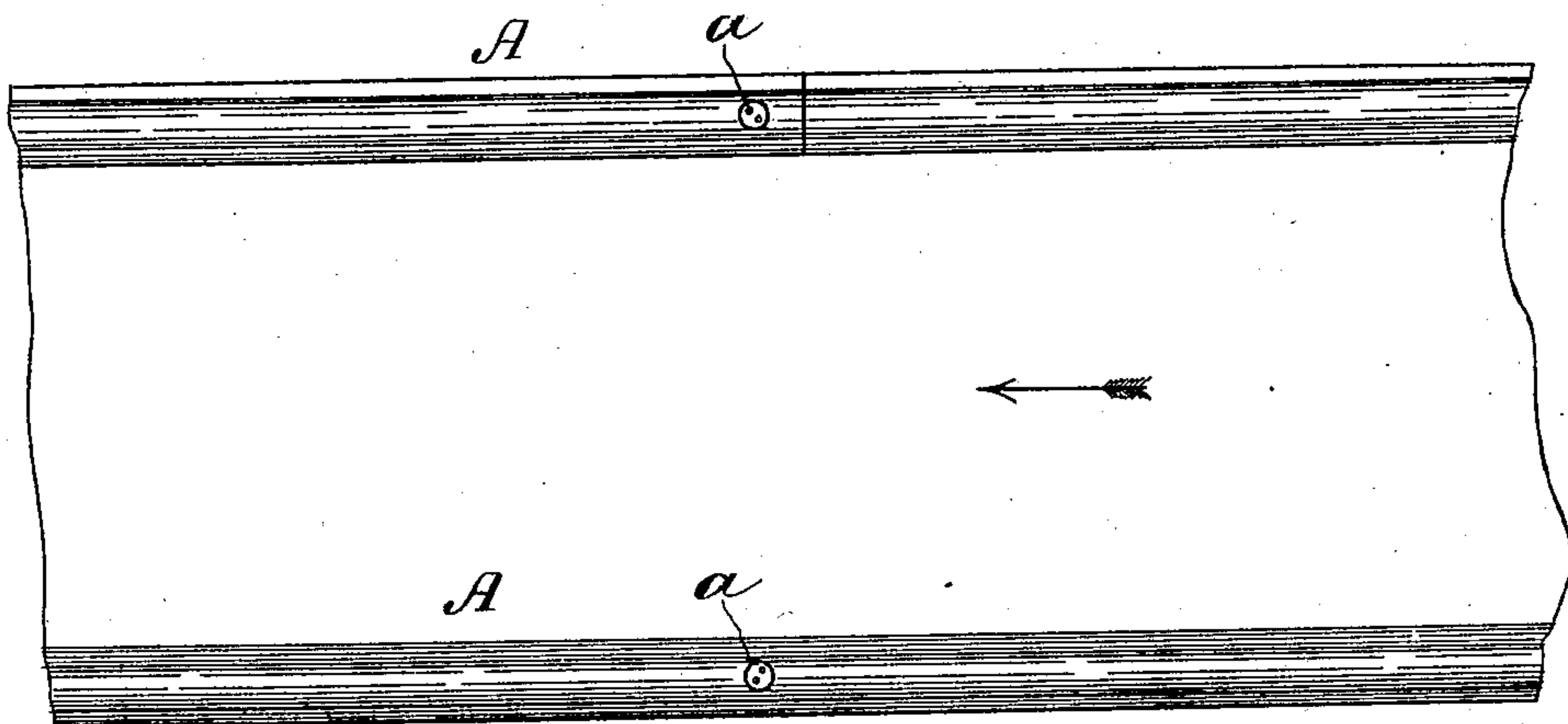


Fig. 6.

WITNESSES:

J. V. Himan
Peter A. Ross

INVENTOR

Crowell M. Dissosway
BY
Henry Bonnett
ATTORNEY

UNITED STATES PATENT OFFICE.

CROWELL M. DISSOSWAY, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF
TO JOHN GOODCHILD, OF SAME PLACE.

INSET RAILWAY-RAIL.

SPECIFICATION forming part of Letters Patent No. 619,013, dated February 7, 1899.

Application filed July 21, 1898. Serial No. 686,510. (No model.)

To all whom it may concern:

Be it known that I, CROWELL M. DISSOSWAY, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Inset Railway-Rails, of which the following is a specification.

This invention relates to means for preventing undue wear of railway-rails at points of impact of the wheels or points where the rail is usually battered or worn by the wheels of the car; and the object of the invention is to provide the rail at the proper point with an inset of a metal harder than the rail itself, this inset being in position to receive the blows from the wheel.

It is well understood by those familiar with railway matters that at points in the track where two rails join end to end one will be or will become after awhile a little higher than the other, and the passage of the wheel of the car from the higher to the lower rail causes a hammering of the lower rail, the point of impact usually being a little way from the end of the lower rail, but not in all cases at the same distance therefrom. The two rails of the track "break joints," and it will be found that where there is hammering at the joint in one rail there will be a hammering of the opposite rail of the track coincident thereto.

The above is one instance where my invention is designed to come in play to preserve the integrity of the rail, and in carrying out the invention I form a recess in the crown of the rail at the point of impact and set therein a plug or inset of metal harder than that of the rail itself. Preferably this will be done by boring a hole in the rail to the desired depth, forming a screw-thread therein, and then screwing into said hole a screw-threaded cylindrical plug of hardened steel; but my invention is not limited to this particular way of making and fixing in place the inset.

In the drawings which serve to illustrate the invention, Figure 1 is a side elevation of a T-rail provided with an inset according to my invention. Fig. 2 is a plan of the same. Fig. 3 is a vertical transverse section of the

rail at line x^3 in Fig. 1. Fig. 4 is a view similar to Fig. 3, showing the application of the invention to another form of rail. Fig. 5 is a plan view of the track on a smaller scale, showing the inset in both rails. Fig. 6 shows a construction where two insets are employed placed side by side. This view shows the rail with a channel for the wheel-flange and shows the insets without screw-threads.

A represents the rail, of whatever kind, and a represents the inset therein at the point of wear or impact from the wheel. Ordinarily the rails will be first laid and the points of wear determined. Then a hole will be drilled in the crown of the rail, a female screw-thread cut therein, and a plug of hardened steel screw-threaded to fit that of the bore or socket screwed in. The small holes shown in the inset a in Figs. 2 and 3 are merely to receive the prongs of a wrench for screwing in the plug. Any other known means may be substituted for these holes, but they are preferred to the ordinary nick.

Figs. 4 and 6 show forms of rails suited for street-railways, and Figs. 1, 2, and 3 the ordinary T-rail. The invention may be used with any form of rail.

There may be more than one inset a , as shown in Fig. 6, and the inset may be secured in place by any means known in the arts. In Fig. 6 no screw-threads are shown, and it is supposed that the insets a are made to fit tightly and are then driven into their sockets.

Obviously the hardened inset will protect the softer rail from the injury incidental to the blows of the wheel.

Preferably the inset a will be of such length that when its lower inner end bears on the bottom of the socket its upper outer end will be about flush with the crown or upper surface of the rail. Preferably, also, the inset will be, as shown, integral or in one piece; but it might be in more than one piece.

By the word "inset" as herein employed is meant a piece embedded in the crown of the rail and forming when in place a permanent and substantial portion of the rail itself. This embedded piece, according to my invention, will be of harder metal than that of the rail, as beforestated, but will be a part thereof.

Having thus described my invention, I claim—

1. A railway-rail having a piece or inset of metal harder than the rail itself, set down into
5 the crown of the rail at a proper distance from the end of the latter, and fixed in position so as to form a substantially integral part of the rail.
2. A railway-rail having in its crown an in-
10 set of metal harder than that of the rail itself,

said inset being of cylindrical form and screwed into a socket in the rail.

In witness whereof I have hereunto signed my name, this 18th day of July, 1898, in the presence of two subscribing witnesses.

CROWELL M. DISSOSWAY.

Witnesses:

PETER A. ROSS,
HENRY CONNETT.