A. E. SCHULTZ.

BUMPING POST.

APPLICATION FILED NOV. 22, 1910.

986,509. Patented Mar. 14, 1911.

Fig. 1.

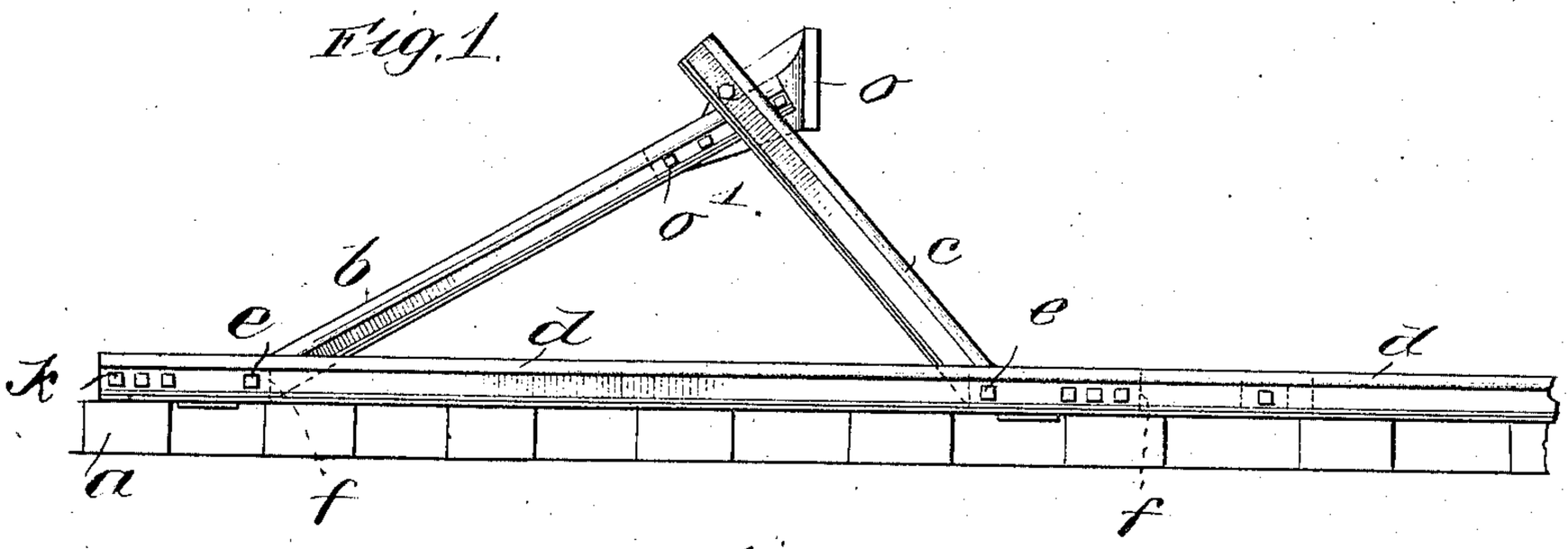


Fig. 2.

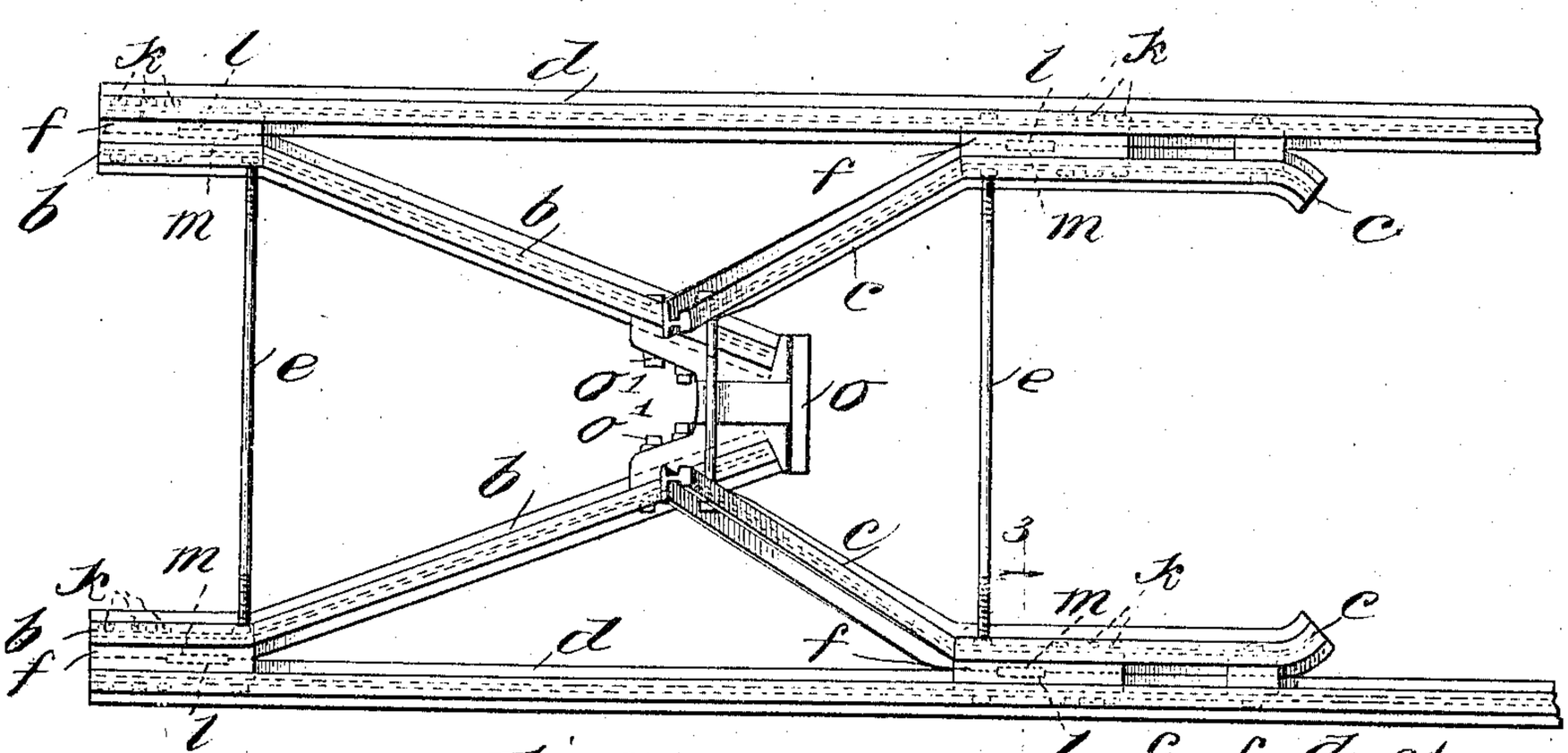


Fig. 6.

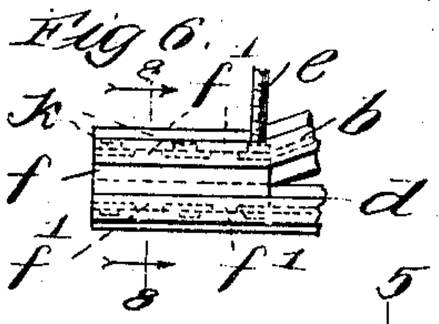


Fig. 7.

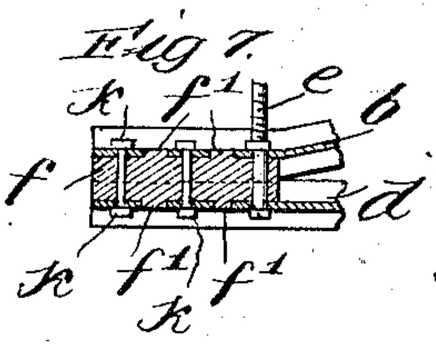


Fig. 8.

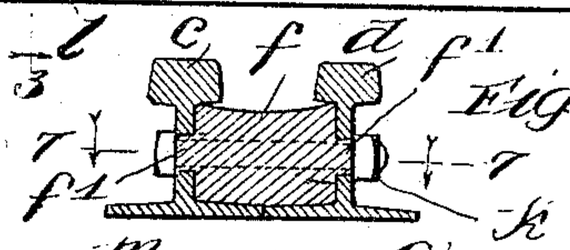


Fig. 3.

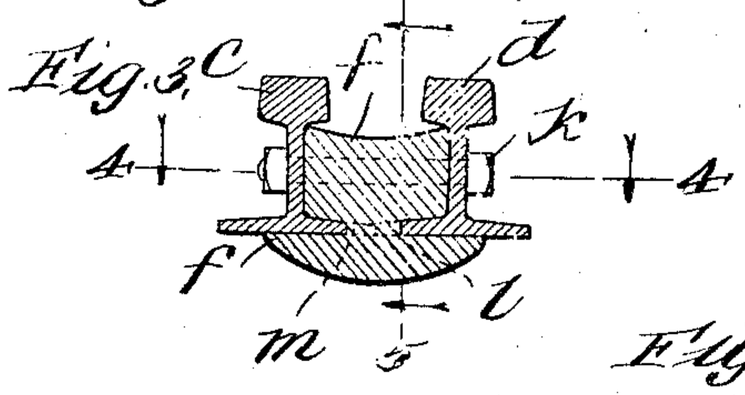


Fig. 5.

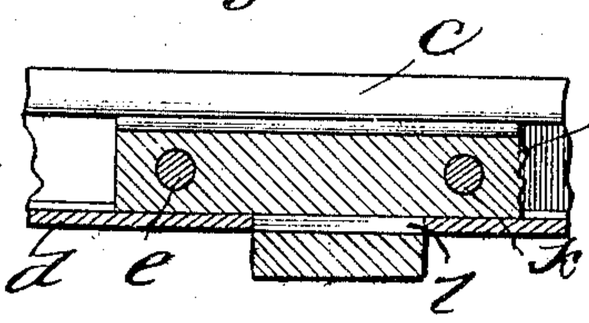
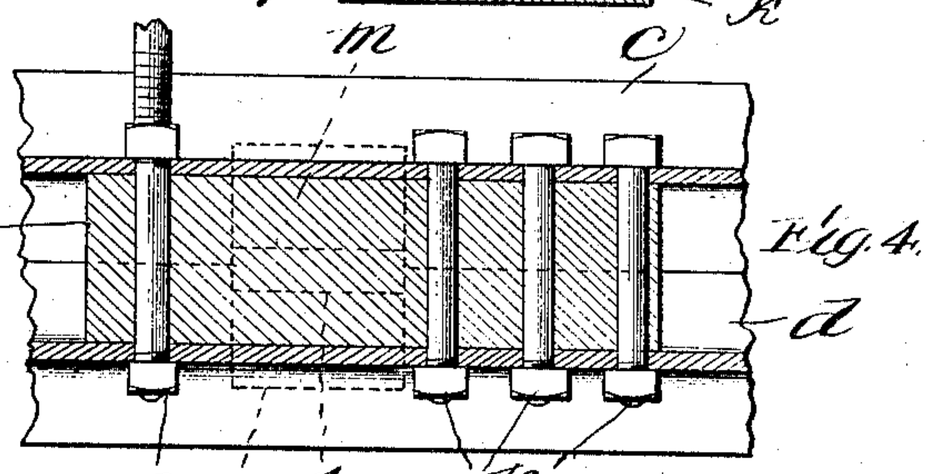


Fig. 4.



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UNITED STATES PATENT OFFICE.

AUGUST E. SCHULTZ, OF CHICAGO, ILLINOIS.

BUMPING-POST.

986,509. Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed November 22, 1910. Serial No. 593,725.

To all whom it may concern:

Be it known that I, AUGUST E. SCHULTZ, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Bumping-Posts, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to bumping posts and will be well understood in connection with a specific description of two embodiments thereof found in the accompanying drawing, in which—

Figure 1 is a view in elevation of one form of post; Fig. 2 is a plan view of the structure shown in Fig. 1; Fig. 3 is a sectional elevation on line 3—3 of Fig. 2; Fig. 4 is a sectional plan on line 4—4 of Fig. 3; Fig. 5 is a sectional elevation of a part of the structure shown on line 5—5 of Fig. 3; Fig. 6 is a plan view of a modified portion of the structure; Fig. 7 is a sectional plan view on line 7—7 Fig. 8; and Fig. 8 is a sectional view on line 8—8 Fig. 6.

Like parts are indicated by similar characters of reference throughout the different figures.

The bumping post of my invention is well adapted to be supported upon the ordinary cross ties *a* and may be conveniently constructed mainly out of ordinary traction rails found in steam railroad practice, though I do not limit myself to the shape of the rails. The bumping post shown includes, generally speaking, three main elements, one including the rear inclined rails *b*—*b*, another including the forward inclined rails *c*—*c* and the third including the horizontally disposed rails *d*—*d* which serve to tie together the bases of the rails *b* with the bases of the rails *c* as illustrated. The rails *d* preferably constitute the main track rails. The horizontal bases of the inclined rails are united with the base rails *d* by a structure located at each base and including a filler block *f*, preferably of metal, interposed between the webs of the adjacent rails, these rail webs being clamped into engagement with said filler block *f* by means of clamping bolts *k*. By means of the structure thus described a very rigid union is effected between the traction rails *d* and the bases of rails *b c*.

The main track or stock rails are prevented from spreading apart, as also are the horizontal bases of the inclined rails *b* and the inclined rails *c*, by means of the rods *e* that pass through the rail flanges of said rail bases and traction rails as indicated clearly in Fig. 2 and are preferably secured thereto as indicated very clearly in Fig. 4.

The bolts *k* and the tie rods *e* are relieved of shearing strain by causing the filler blocks through which they pass to be in interlocking engagement with the rails between which the filler blocks are located, and where rails of traction rail formation are employed I preferably select the rail flanges for interlocking engagement with the filler blocks and I effect this interlocking engagement preferably by cutting oblong notches in the adjacent edges of the flanges of the rails *d* and the bases of the inclined rails and causing the elements *f* to be received therein to secure the desired interlocking. These notches in the bases of the rails *d* are indicated at *l* and the corresponding notches in the horizontal bases of the inclined rails are indicated at *m*. In certain of my claims I do not limit myself to the use of the element *f* to fill the spaces between rail webs when such element has the described rail flange engagement. The filler blocks desirably extend below and engage the under sides of the rail flanges and in such case are provided with lateral recesses for snugly receiving portions of the rail flanges as indicated most clearly in Fig. 3. This snug fit of filler block and rail flanges holds the base rails and the horizontal bases of the inclined rails in the same plane when the bumping post is subject to violent impact.

In the form of the invention shown in Figs. 6, 7 and 8, the filler blocks do not interlock with the rail flanges but with the rail webs instead and to this end these filler blocks are provided with round lugs f^1 received within corresponding openings in the rail webs. With either interlocking method the filler blocks and rails receive the thrusts and guard the bolts and tie rods against shearing strain.

When my invention is embodied as shown, the main traction of stock rails may be employed as the base rails, but I do not wish to be limited to the employment of the traction rails as base rails. When the structure is made as illustrated in Figs. 1 to 5 inclusive the notches *l* and holes for the elements *e* and

k constitute the only modification of the base rails required. If the structure is made as shown in Figs. 6 to 8 inclusive the holes that receive the portions f^1 replace the notches *l*. The rest of the structure is made at the factory and may readily be assembled with the base rails when modified as stated. It is apparent that the filler blocks maintain a rigid relation between the base rails and the bases of the inclined rails, the tops of the filler blocks being depressed sufficiently below the heads of the rails to accommodate the wheel flanges. I do not limit myself to inclined bumping blocks supporting rails nor to the number thereof.

While I have herein shown and particularly described two embodiments of my invention, it is obvious that modifications may readily be made without departing from the spirit of my invention and I do not, therefore, limit myself to the precise details of construction shown, but

Having thus described my invention I claim as new and desire to secure by Letters Patent the following:

1. A railway bumping post including flanged base rails; a bumping block; flanged rails supporting the bumping block; and filler blocks interposed between the base rails and the bumping block supporting rails and received into notches provided in the flanges of said rails.

2. A railway bumping post including flanged base rails; a bumping block; flanged rails supporting the bumping blocks; and elements affording interlocking engagement between the flanges of the base rails and bumping block supporting rails by being received into notches provided in said flanges.

3. A railway bumping post including flanged base rails; a bumping block; and flanged rails supporting the bumping block, the flanges of the base rails and the flanges of the bumping block supporting rails being interlocked.

4. A railway bumping post including flanged base rails; a bumping block; flanged rails supporting the bumping block; and filler blocks interposed between the webs of the base rails and the webs of the bumping block supporting rails and having interlocking engagement with the rails.

5. A railway bumping post including flanged base rails; a bumping block; flanged rails supporting the bumping block; and means for affording interlocking engagement between the flanges of the base rails and the flanges of the bumping block supporting rails.

6. A railway bumping post including flanged base rails; a bumping block; rails supporting the bumping block; and filler blocks interposed between the base rails and the bumping block supporting rails and received into notches provided in the flanges of said base rails and in thrust engagement with the bumping block supporting rails.

7. A railway bumping post including flanged base rails; a bumping block; rails supporting the bumping block; and elements interposed between the base rails and the bumping block supporting rails and received into notches provided in the flanges of said base rails and in thrust engagement with the bumping block supporting rails.

8. A railway bumping post including flanged base rails; a bumping block; and rails supporting the bumping block, the flanges of the base rails and the bumping block supporting rails being interlocked.

9. A railway bumping post including flanged base rails; a bumping block; rails supporting the bumping block; and filler blocks interposed between the webs of the base rails and the bumping block supporting rails and having interlocking engagement with the rails.

10. A railway bumping post including flanged base rails; a bumping block; flanged rails supporting the bumping block; and means for affording interlocking engagement between the flanges of the base rails and the flanges of the bumping block supporting rails.

11. A railway bumping post including base rails; a bumping block; rails supporting the bumping block; and filler blocks interposed between the base rails and the bumping block supporting rails and having interlocking engagement with the rails.

In witness whereof, I hereunto subscribe my name this eighteenth day of November A. D., 1910.

AUGUST E. SCHULTZ.

Witnesses:
FRED KRAFT,
WILLIAM C. SCHULTZ.