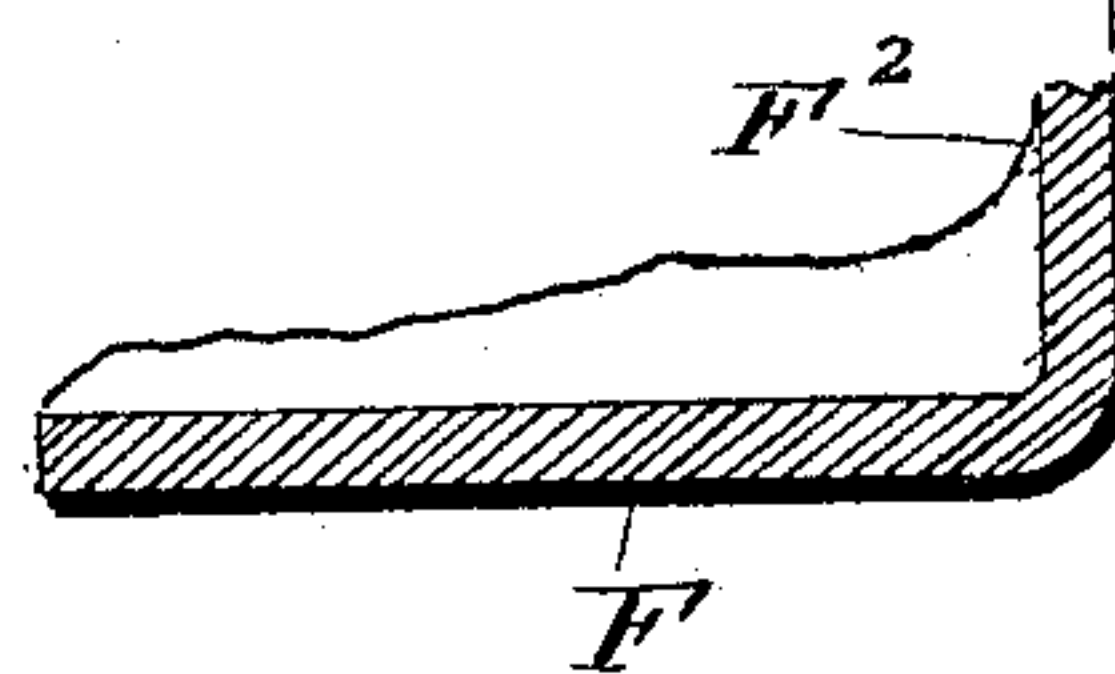
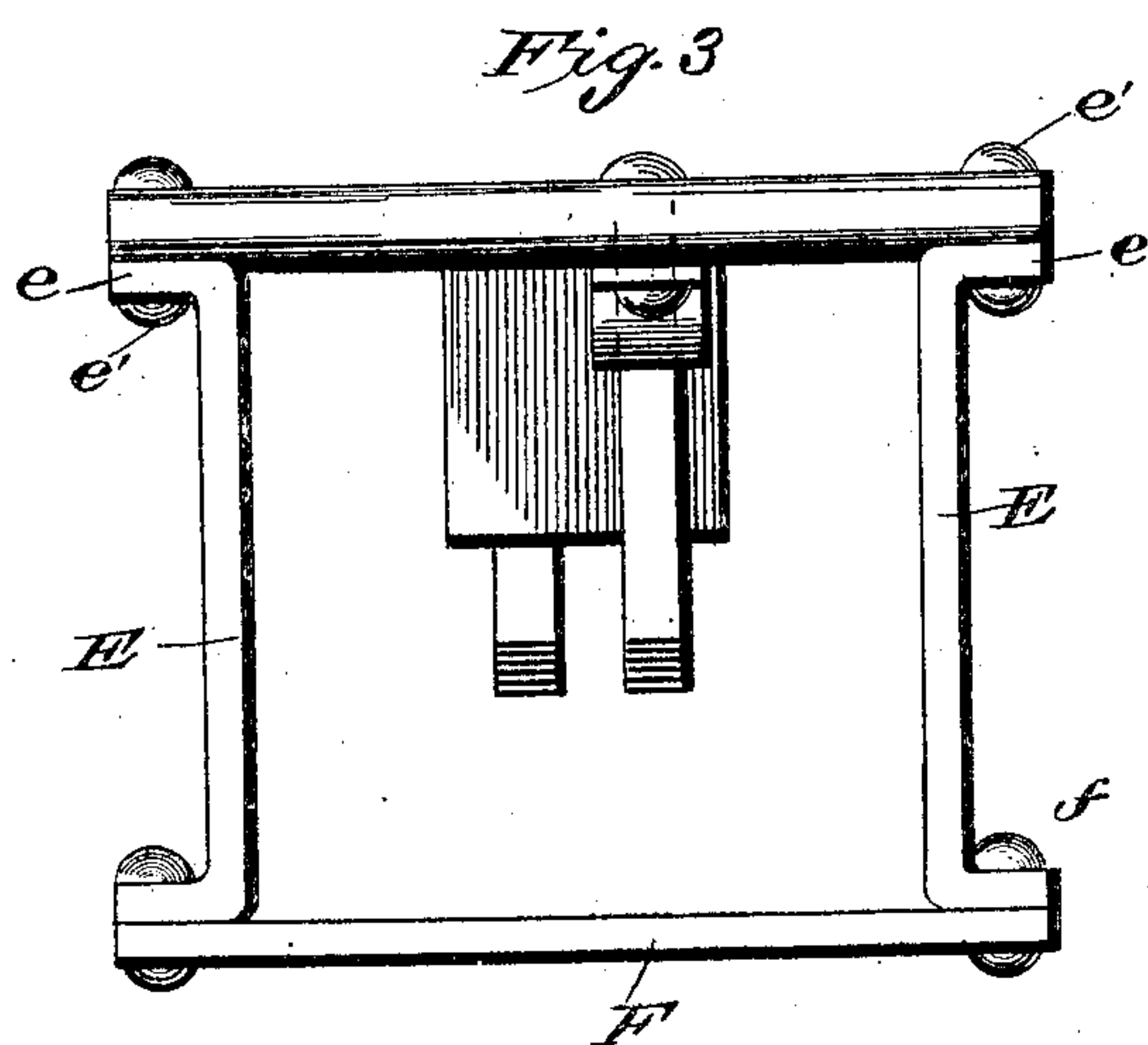
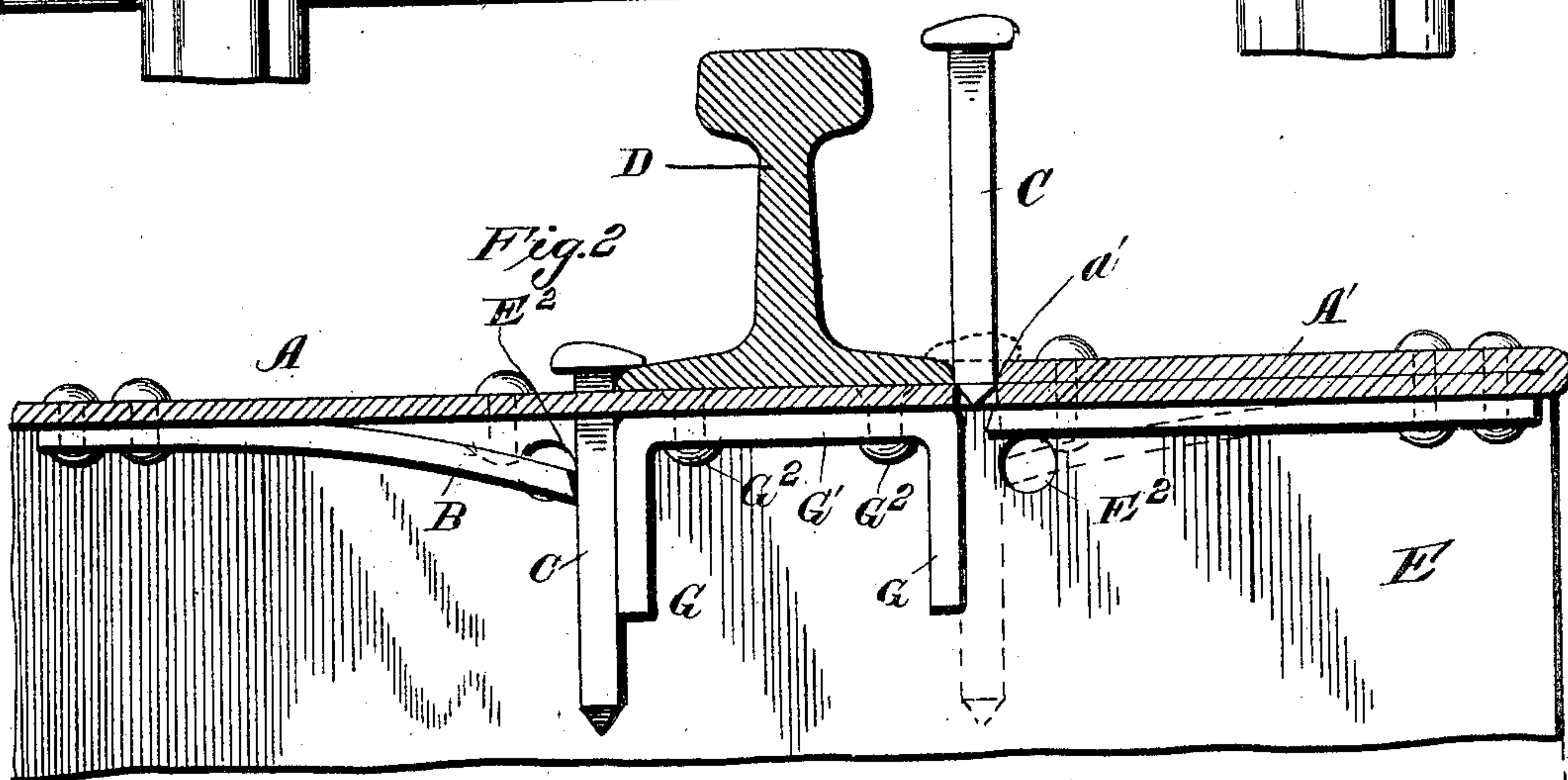
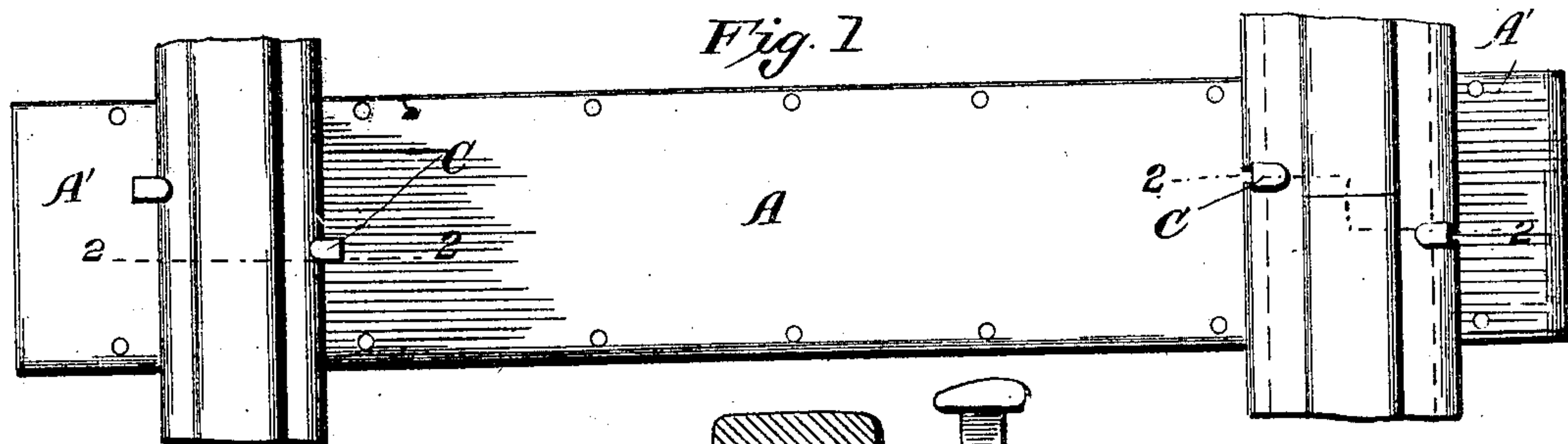


No. 798,220.

PATENTED AUG. 29, 1905.

E. F. SEIDER.
RAILROAD TRACK.
APPLICATION FILED NOV. 19, 1904.

2 SHEETS—SHEET 1.



WITNESSES:
W. S. Rodwell
A. M. Cunn

Fig. 5

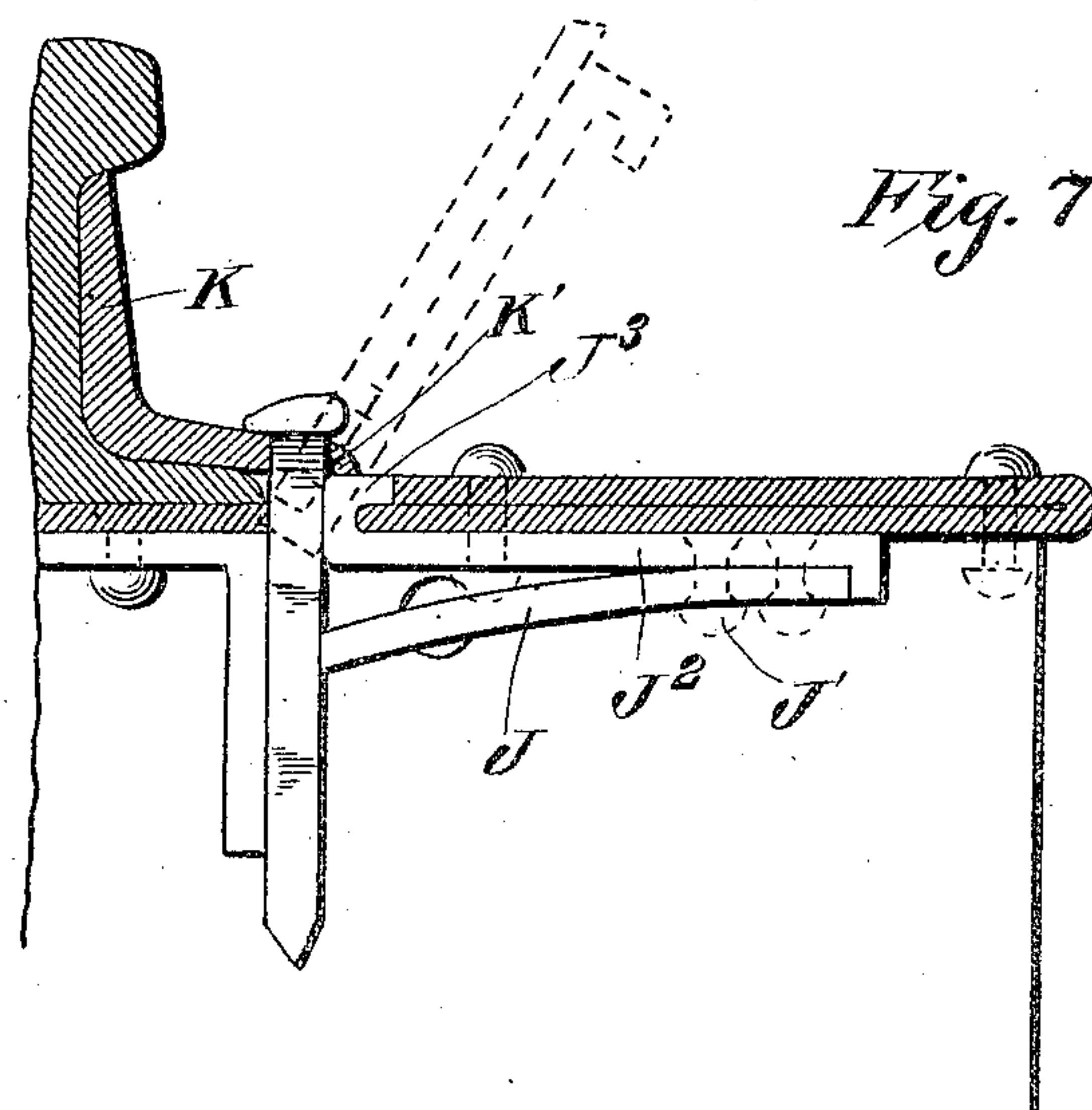
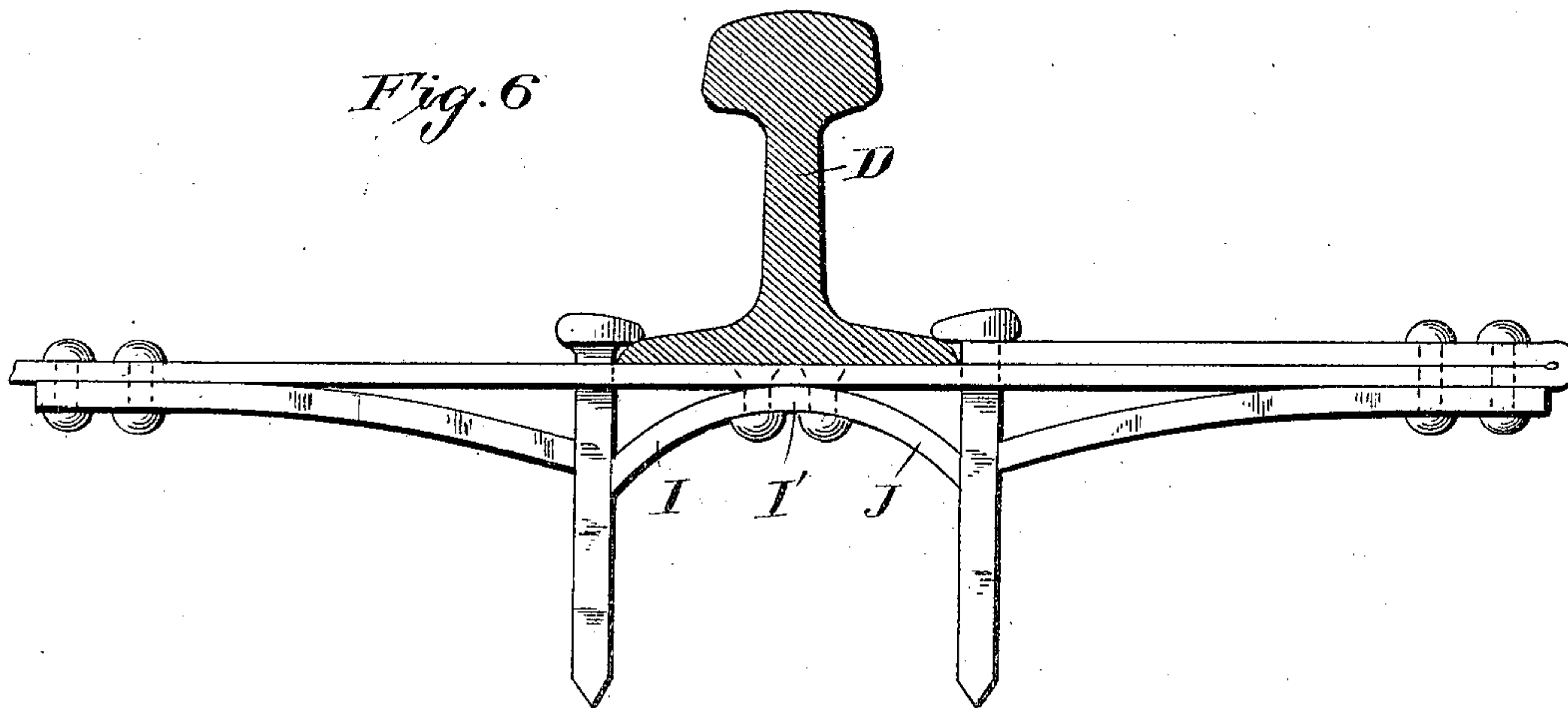
INVENTOR
Edwin F. Seider
BY *Mum & Co*
ATTORNEYS

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2 SHEETS—SHEET 2.



WITNESSES:

W. S. Rockwell
A. M. Burn

INVENTOR

Edwin F. Seider
BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWIN FREDERICK SEIDER, OF UPPER SANDUSKY, OHIO.

RAILROAD-TRACK.

No. 798,220.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed November 19, 1904. Serial No. 233,509.

To all whom it may concern:

Be it known that I, EDWIN FREDERICK SEIDER, a citizen of the United States, residing at Upper Sandusky, in the county of Wy-

5 andot and State of Ohio, have made certain new and useful Improvements in Railroad-Tracks, of which the following is a specification.

My invention is an improvement in railroad-tracks, and has for an object to provide, together with other improvements, novel devices for securing the rail-fastening spikes in connection with a metal rail-supporting plate; and the invention consists in certain novel

15 constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of a tie, rail-supporting plate, and rail-sections embodying my invention. Fig. 2 is

20 a detail vertical section on about line 2 2 of Fig. 1. Fig. 3 is an end view of the tie provided with the spike-securing devices. Fig. 4 is a detail perspective view showing a somewhat different means of providing the abut-

25 ments or back bearings for the spikes. Fig. 5 illustrates a different construction of the base of the tie. Fig. 6 is a sectional view illustrating a different form of spike-abutment from that shown in Fig. 2, and Fig. 7

30 is a detail sectional view illustrating a removable carrier for the spring-acting pawl.

By my invention I seek to provide, in connection with the rail-supporting plate A, spring-acting pawls B, which by their spring action bind at their points or free ends against the spikes C when the latter are driven to position to secure the rail D, as shown in Fig. 2. The pawls B are suitably held at one end in connection with the plate A and spring at

40 their other ends when pressed from the position shown at the right in Fig. 2 to that shown in the left in the said figure into binding contact with the spikes C to lock the same firmly in place. The plate A is shown as the

45 top plate of a tie whose side plates E rise from the opposite edges of the bottom plate F, the plate A being riveted at e' to the out-turned flanges e at the upper edges of the side plates E. The bottom plate F of the tie may

50 be made separate from the side plates E and the parts suitably riveted together at f , as shown in Fig. 3, or, if desired, the bottom plate and side plates may be made integral, as illustrated at F' and E' in Fig. 5. It may

55 be desirable also to provide at the opposite ends of the bottom plate F extensions or wings

F², as indicated in Fig. 2, which wings may be turned up to wholly or partially close the ends of the hollow tie. I also provide the side plates E with openings E² in line with

60 the free ends or points of the pawls B and through which suitable punches or instruments may be inserted to force the pawl-point down from the position shown at the left in Fig. 2 to free the same from engagement with

65 the spike C, so the latter may be withdrawn. I prefer to provide an abutment opposite the spring-acting pawl against which abutment the spike C may be pressed by the action of the pawl. This may be effected by the con-

70 struction shown in Figs. 2 and 3, in which lugs G depend from the rail-supporting-plate A and form bearings against which the spikes are pressed by the pawls B. These lugs G are bent down from the opposite ends of a

75 plate G', riveted at G² to the plate A. I may, however, provide these abutments by cutting out the top plate A, as illustrated at H in Fig. 4, and bending down the cut-out portion H', as will be understood from the said Fig. 4.

80 It will also be understood that I may employ the construction shown in Fig. 6, in which the abutment is in the form of spring-pawls I, provided at the opposite ends of a plate I', secured to the top plate beneath the rail and

85 operating with a pawl action on the sides of the spike opposite the spring-acting pawls, the latter operating like the pawls B before described. By this construction I have a spring-acting pawl operating on both sides of

90 the spike to lock the same in place.

For some purposes, especially in making repairs, I may find it desirable to employ a removable carrier for the spring-acting pawl, and I have illustrated such a construction in

95 Fig. 7, in which the pawl J is secured at J' to a plate J³, whose end J³ is hooked, so that the pawl and its plate may be adjusted through the opening for the spike from the position indicated in dotted lines in Fig. 7 to that

100 shown in full lines in the same figure, in which the spring-acting pawl will be held by the hooked end J² in position to operate as desired. Manifestly this construction may be employed in new work, in repairs, or otherwise, as may

105 be desired.

As shown in Figs. 2 and 7, the top plate A has its ends returned at A' to form a bearing for the outer edge of the base of the rail, and a free edge of the returned portion may be

110 notched at a' (see Fig. 2) to receive the spike.

I may find it desirable to employ my inven-

tion in connection with a fish-plate, such as shown at K in Fig. 7, or the fish-plate may be omitted, as will be understood from Fig. 2. When the fish-plate is employed, its edge may
5 be notched at K' to receive the spike, as illustrated in Fig. 7 of the drawings.

By my invention I am able to fasten a rail to a metal tie or sleeper, the latter to be a substitute for the wooden tie now generally employed.
10 The improved tie as constructed will prevent the rails from spreading and the rails can be laid more readily and uniformly and will require no gage in order to get the proper width of track and keep the track in line.
15 The tie being hollow and the parts forming the lock for the spike being within the tie and protected will not corrode or rust as if they were open to the weather.

In the use of the invention ballast can be packed around the tie so it will not creep or slide. The tie may be made of any suitable length, and where switches are run in the ties can be made any suitable lengths and fasteners applied to any part of the top plate to properly
20 secure the rails.

It will be noticed from Figs. 2, 6, and 7 that the free ends of the spike-locking pawls are sloped or beveled, and these may be so arranged that the end of the pawl will fit flat against the spike when the latter is locked, as shown
30 in Fig. 7, or the parts may be so arranged that simply the point of the pawl will lock against the spike in the locked position of the latter, as shown at the left in Fig. 2. In
35 either case the free end of the pawl will operate to lock the spike securely in place, and yet so it can be readily removed by releasing the pawl in the manner before described.

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

1. The improvement in railroad-tracks herein described comprising the tie having a bottom plate, side plates rising therefrom and a
45 top plate secured to said side plates and returned at its ends forming bearings for the outer edges of rail-bases, said top plate being provided with openings for the rail-securing spikes and between said openings with a plate

having depending lugs at its ends in line with the spike-openings and forming abutments for the spike, the rail on the supporting-plate, the spikes driven through the openings in the supporting-plate and resting at one side against the depending abutment-lugs, and the
55 spring-acting pawls bearing at their free ends against the spikes and locking the same by a pawl action substantially as set forth.

2. The combination in a railroad-track, of a plate having a spike-opening and a lug depending from said plate and forming an abutment for one side of the spike, of a spring-acting pawl held at one end to the supporting-plate and arranged to bear at its other or free end against the spike and to lock the same on
65 the side thereof opposite the lug or abutment, substantially as set forth.

3. The combination of a railroad-rail, a plate supporting the same and having a spike-opening, a spike and a spring-acting pawl arranged
70 at its free end to lock the spike substantially as set forth.

4. In a device substantially as described, a rail-supporting plate having a spike-opening and a pawl arranged at its free end or point
75 to lock the spike when driven through said opening substantially as set forth.

5. The combination of a rail-supporting plate having spike-openings, an abutment-plate secured between its ends to the top plate
80 between said spike-openings and arranged at its ends to form abutments for one side of the spikes and pawls acting at their free ends against the opposite sides of the spikes and pressing the same against the abutments and
85 locking the said spikes, substantially as set forth.

6. The combination of a rail-supporting plate having spike-openings, spike-locking pawls arranged at their free ends to lock the
90 spikes, and an abutment-plate arranged at its ends to form abutments for the spikes in opposition to the locking-pawls, substantially as set forth.

EDWIN FREDERICK SEIDER.

Witnesses:

SOLON C. KEMON,
PERRY B. TURPIN.