

(No Model.)

M. POTTER.
RAILROAD RAIL SEAT.

No. 360,910.

Patented Apr. 12, 1887.

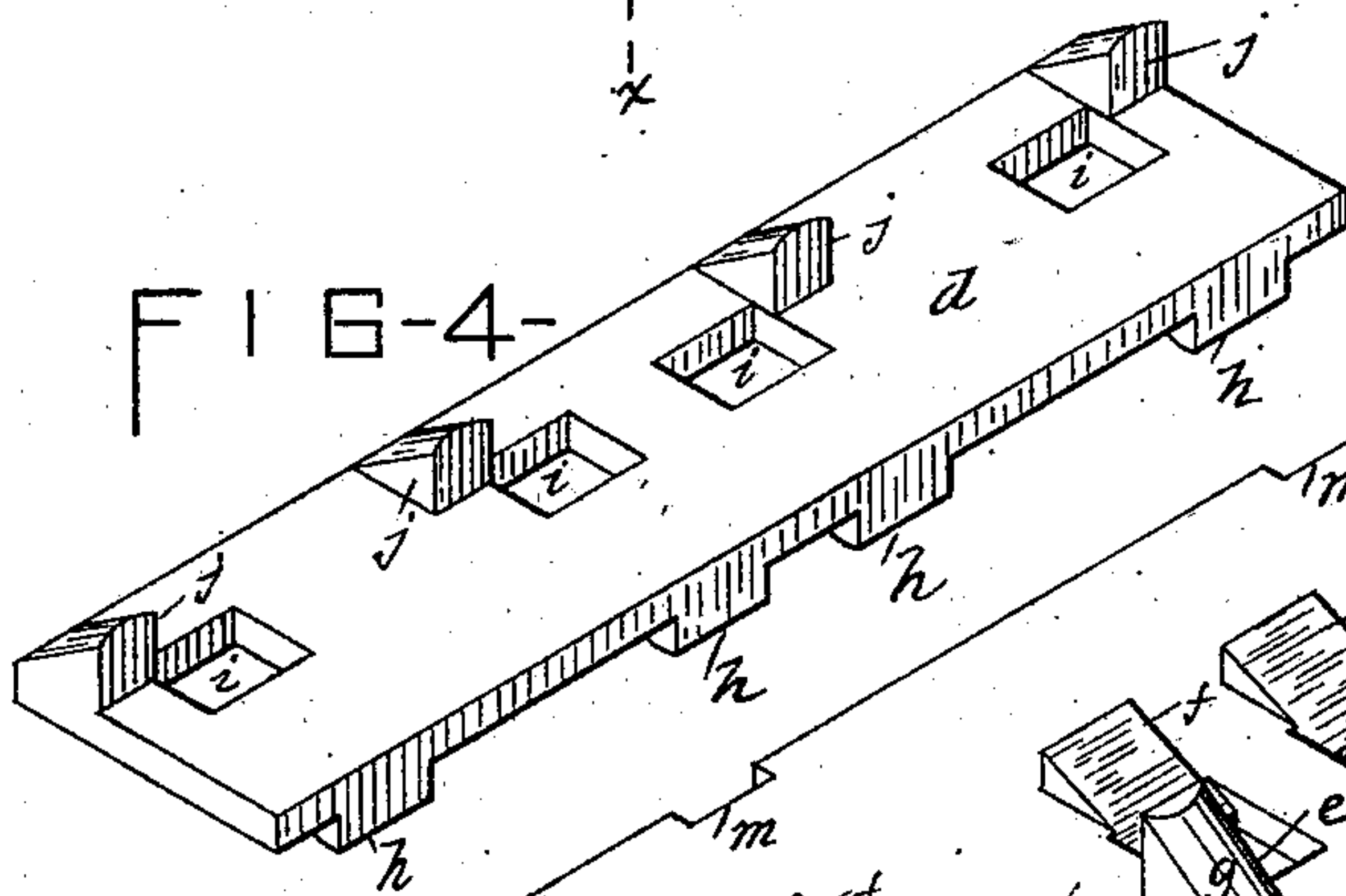
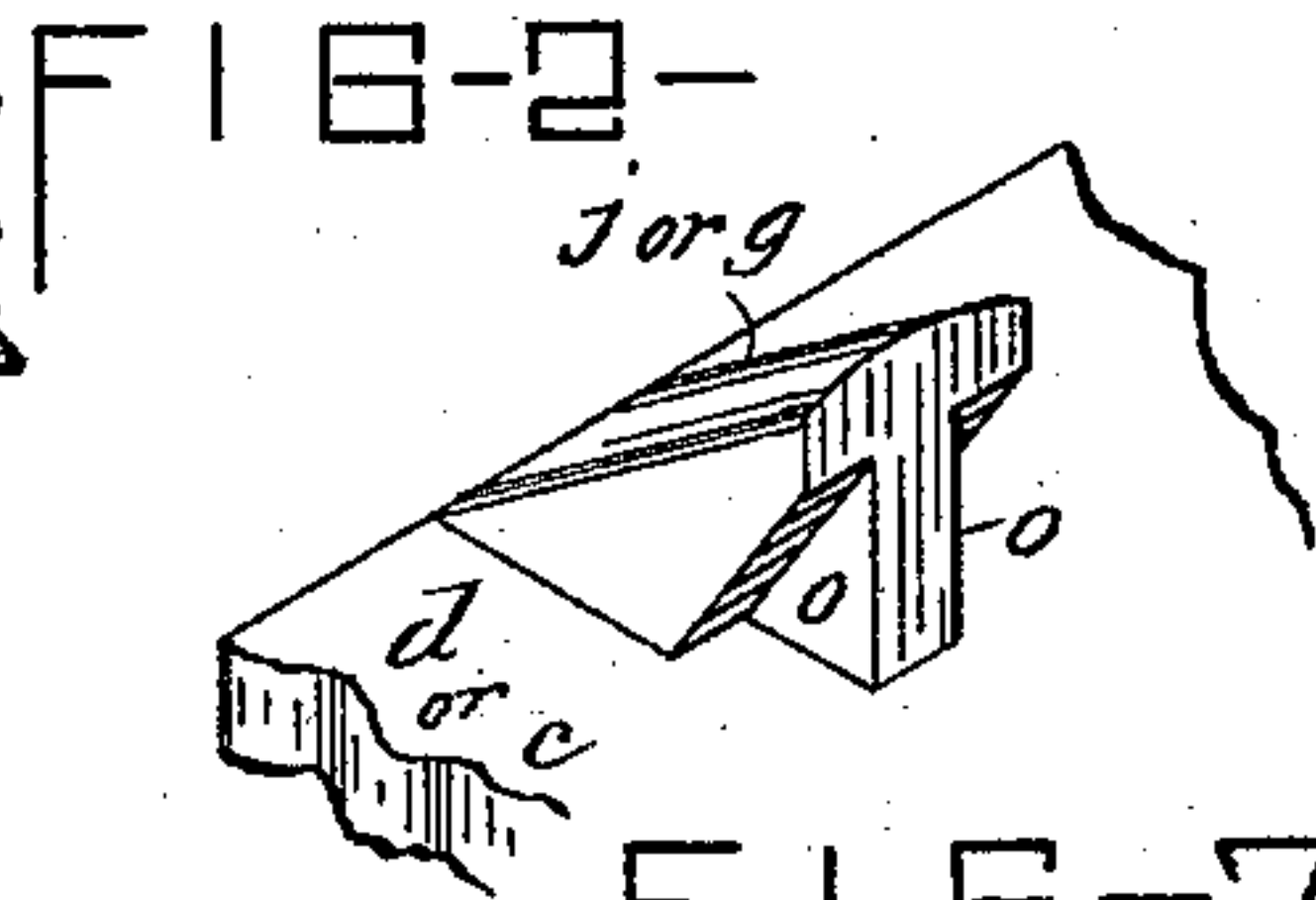
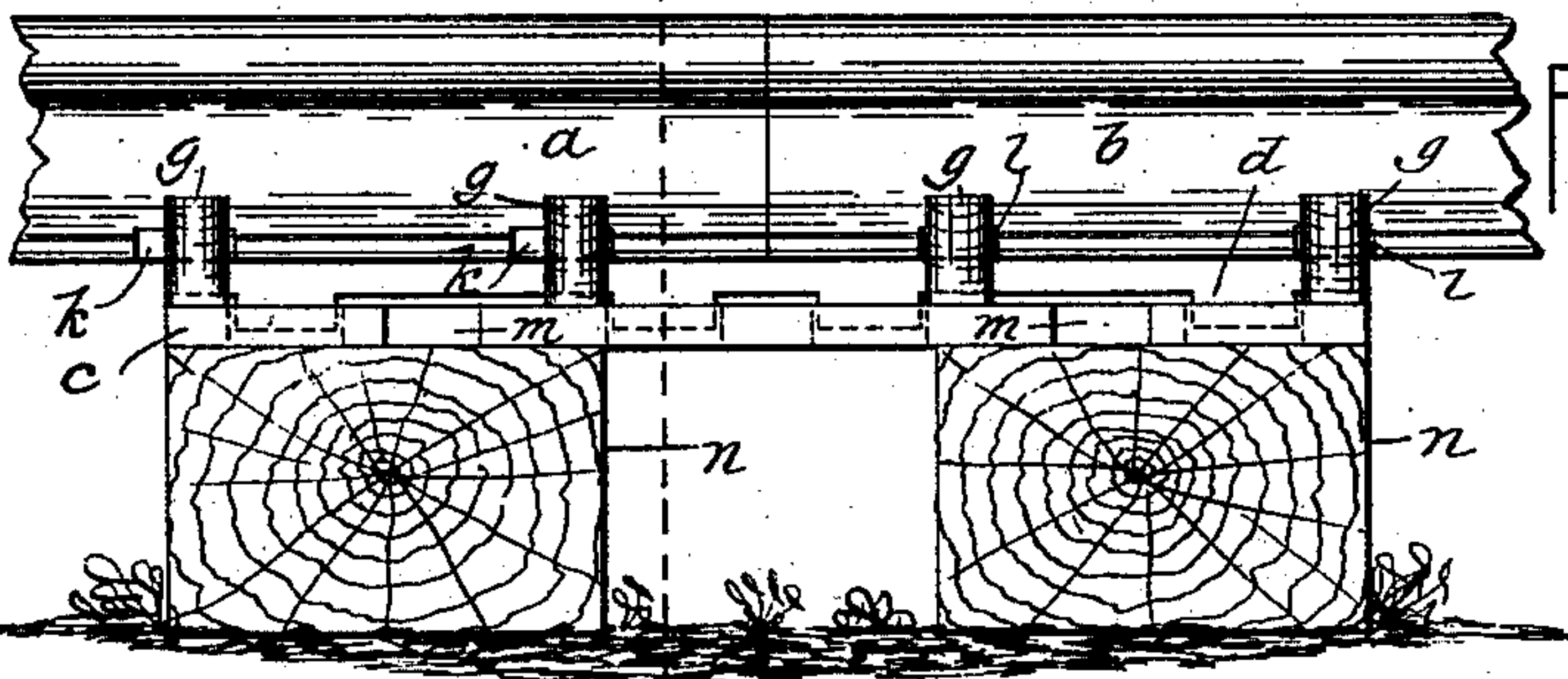
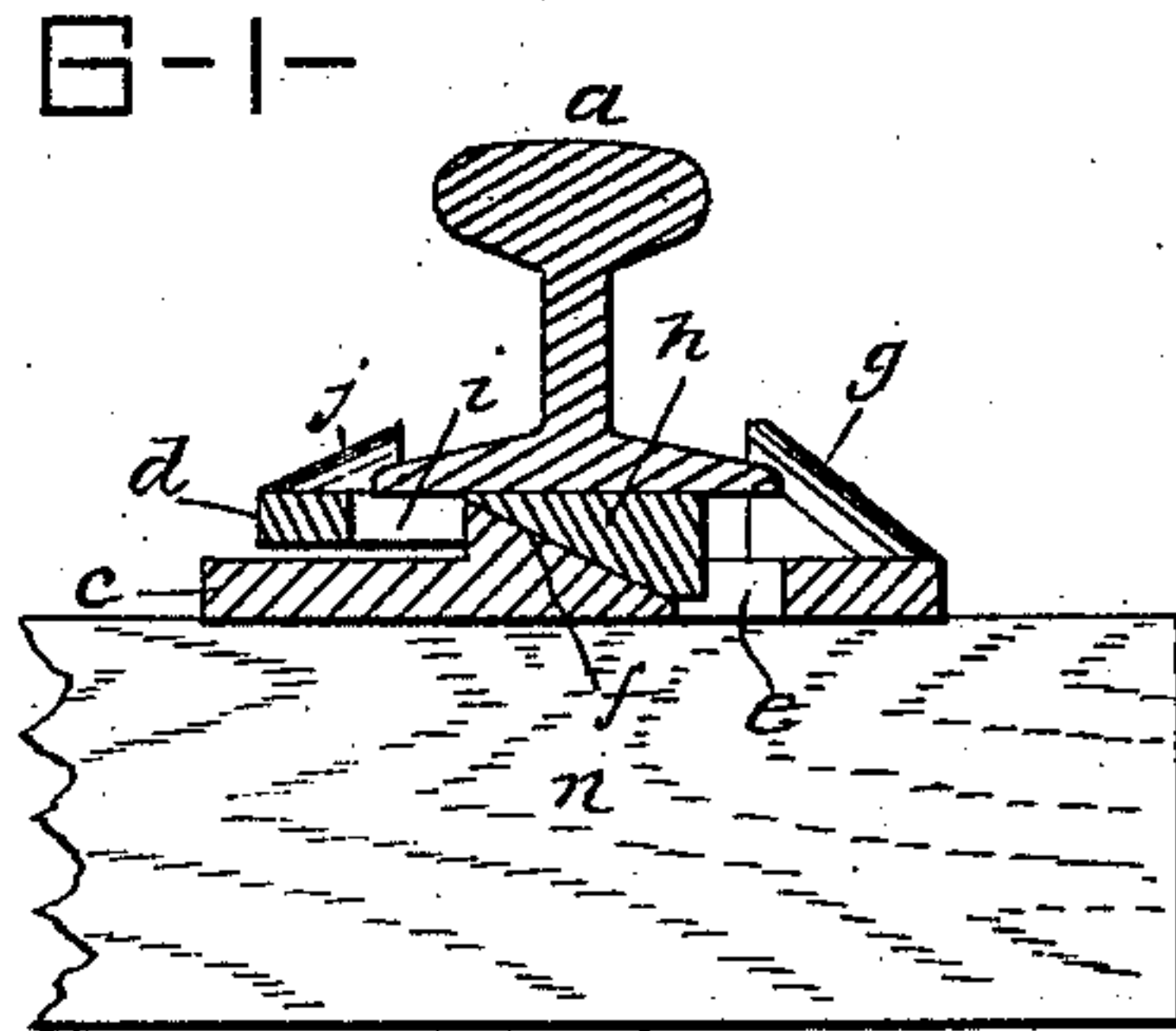
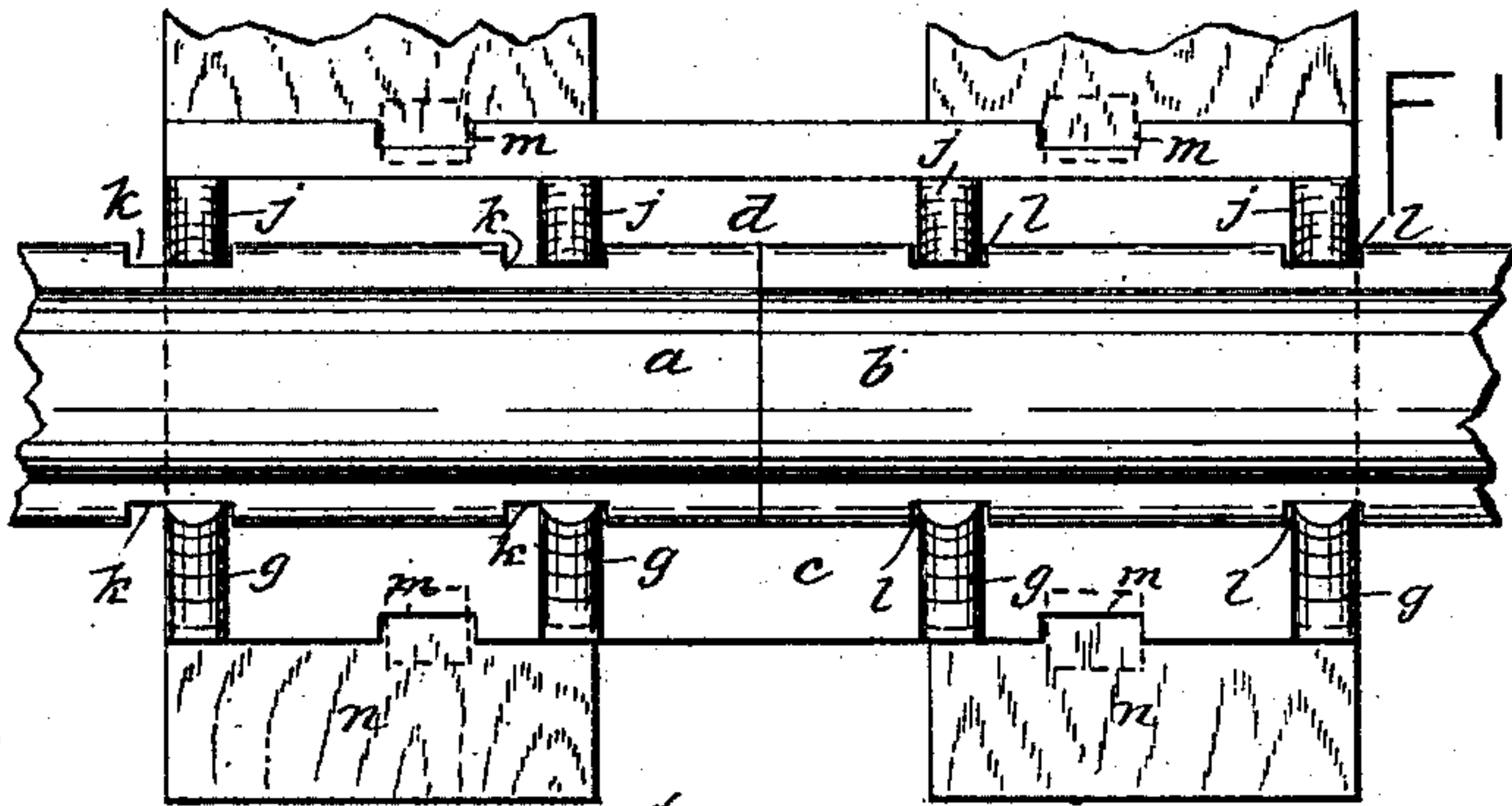


FIG 5-

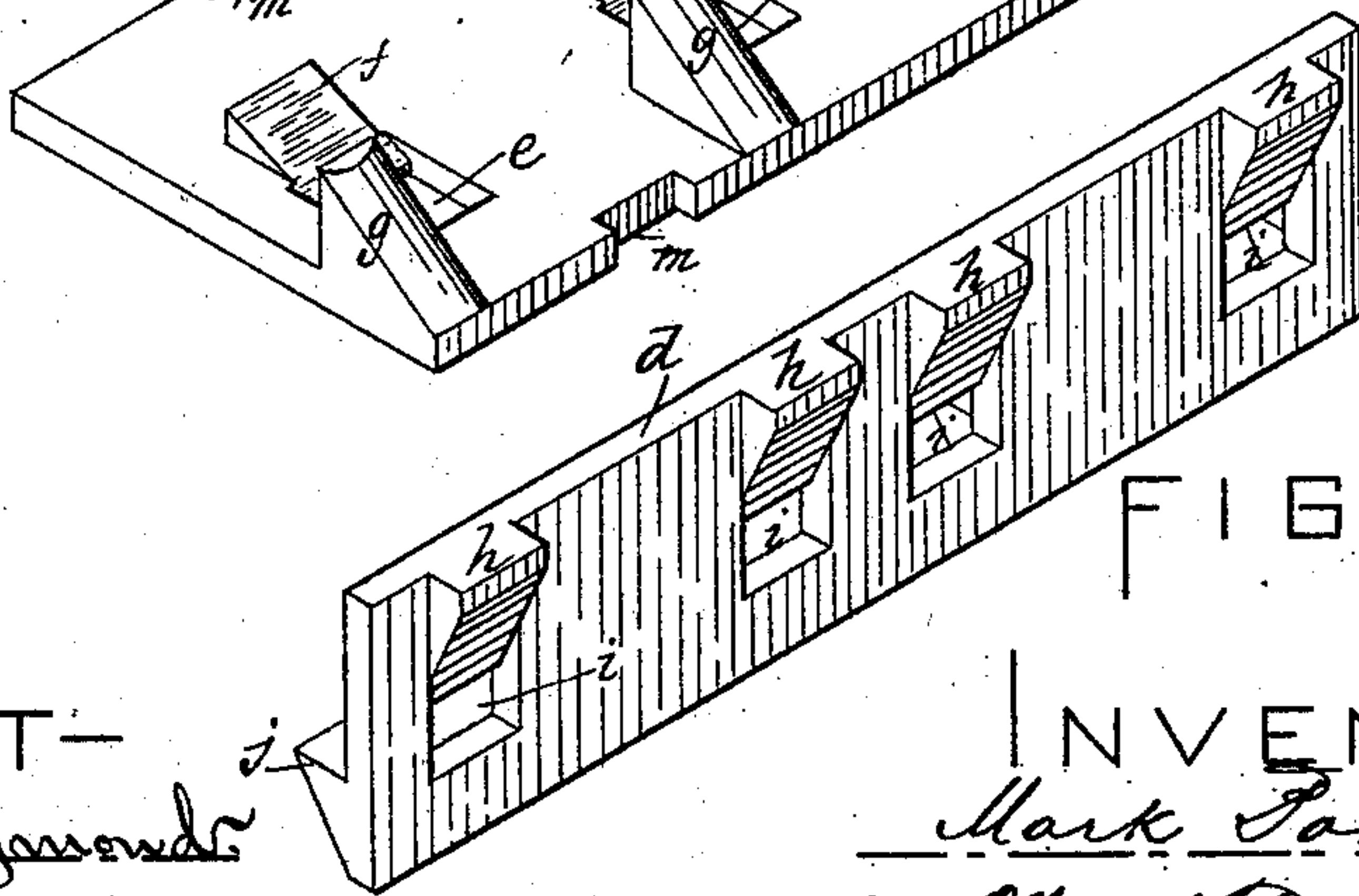


FIG 6-

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UNITED STATES PATENT OFFICE.

MARK POTTER, OF SYRACUSE, NEW YORK.

RAILROAD-RAIL SEAT.

SPECIFICATION forming part of Letters Patent No. 360,910, dated April 12, 1887.

Application filed August 2, 1886. Serial No. 209,725. (No model.)

To all whom it may concern:

Be it known that I, MARK POTTER, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Railroad-Rail Seats, of which the following is a full, clear, and exact description.

The object of this invention is to provide a seat or chair for the meeting ends of railroad-rails which will permit the usual movement of the rails incident to their contraction and expansion, and which will at the same time securely hold said rails to the ties, the grip of said seat or chair upon the rails being increased as weight is applied to the rails—as by a passing car—and in this latter respect my device is in effect an automatic gripping device.

In general terms, the invention consists in the bed-plate combined with a rail-receiving plate superposed upon the former and having matching inclines and slots and rail-engaging lugs, and constructed to receive the foot of the meeting ends of adjacent rails in such a manner that as weight is applied to the tread of the rail the rail-receiving plate will move toward the rail and down into the bed-plate, and thereby increase the grip of the device upon the rail, as will hereinafter more particularly appear.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a plan view; Fig. 2, a side elevation; Fig. 3, a cross-section taken in the plane of line *xx*, Fig. 2. Fig. 4 is a perspective view of the rail-receiving plate. Fig. 5 is a perspective view of the bed-plate. Fig. 6 is a perspective view of the rail-receiving plate, looking at its under side; and Fig. 7 is a perspective view of a detail.

The road-bed and the ties, and also the rails themselves, may be of approved construction, and the rails spiked to the ties in any ordinary manner, except at the meeting ends of adjacent rails, where my improvement is applied.

The rails *a b* at their meeting ends are provided with a rail seat or chair consisting of a bed-plate, *c*, which is spiked to the ties, and a rail-receiving plate, *d*, which is constructed and arranged, as hereinafter particularly set forth, to interlock with the bed-plate to form, in connection with it, a gripping device to

seize and hold the meeting ends of the rails by their foot-pieces; and to this end the bed-plate *c* is provided with slots *e*, into which lead inclines *f*, rising from the face of the said bed-plate, and said bed-plate is also provided with lugs *g*, also rising from its face. The arrangement of these slots, inclines, and lugs may be substantially as indicated in Fig. 5, to most perfectly receive and secure the meeting ends of adjacent rails. The rail-receiving plate *d* is also provided on its under side with inclined lugs *h*, which ride upon the inclines *f* and work into the slots *e* of the bed-plate, slots *i* being provided on said receiving-plate in alignment with its inclines *h*, to permit the inclines *f* of the bed-plate to move up into the rail-receiving plate, and thus permit the two plates to approach each other while the rail-receiving plate is moving transversely across the bed-plate. The rail-receiving plate is also provided with lugs *j*, rising from its upper surface, which engage the foot-pieces of the meeting ends of the rails *a b*.

One rail will be provided with elongated recesses to engage the lugs *g* and *j*, to permit the usual movement incident to the extension and contraction of the rails, while the other rail will have recesses to fit the other lugs *g* and *j* comparatively close, so as to obviate any tendency to "creep." I have shown the rail *a* provided with the elongated recesses, (here designated *k*,) and the rail provided with the closely-fitting recesses, (here designated *l*.)

The bed-plate will preferably be provided with spike-receiving recesses *m* on opposite sides, and in Fig. 1 I have designated the spikes by dotted lines, the ties being designated *n n*.

It will be seen that the rail rests upon the rail-receiving plate *d*, and that any downward pressure upon the rail will serve, by reason of the engagement of the inclines *f* and *h*, to move the rail-receiving plate transversely of the bed-plate, and thus cause the lugs *g* and *j* to approach and to bind more tightly upon the rail-foot.

The lug shown in Fig. 7 has its sides cut away at *o*, in order to let the intermediate tongue enter the slot, while the laterally-projecting inclined flanges above the cut-away

portions engage the foot of the rail and afford means for bearing down upon the said foot, as well as bearing upon it laterally. Either this form of lug or that shown in the other figures 5 may be used.

I am aware that it is not new to make a rail-chair in two pieces, each provided with a rail-grasping device, the line of division being on an incline, so that the heavier the load on the rail 10 the tighter will be the grasp of the chair, as in United States Patent No. 72,080.

What I claim is—

1. A seat for the meeting ends of railway-rails, consisting of a bed-plate, and a rail-receiv- 15 ing plate superposed upon the former and provided with matching inclines and slots, and with rail-engaging lugs, combined and arranged substantially as set forth, so that when weight is placed upon the rails the lugs of the 20 two plates approach and increase their grip upon the rail, substantially as described.

2. A seat for the meeting ends of railway-rails, consisting of a bed-plate, and a rail-receiv- ing plate superposed upon the former and pro- 25 vided with matching inclines and slots, and with rail-engaging lugs combined with and rigidly engaging one of the rails, substantially as described.

3. A seat for the meeting ends of railway-rails, consisting of a bed-plate, and a rail-receiv- 30 ing plate superposed upon the former and provided with matching inclines and slots, and with rail-engaging lugs combined with and rigidly engaging one of the rails, and loosely en- 35 gaging the other of said rails, substantially as described.

In testimony whereof I have hereunto set my hand this 31st day of July, A. D. 1886.

MARK POTTER.

Witnesses:

WM. L. FRISBIE,

A. D. PERRY.