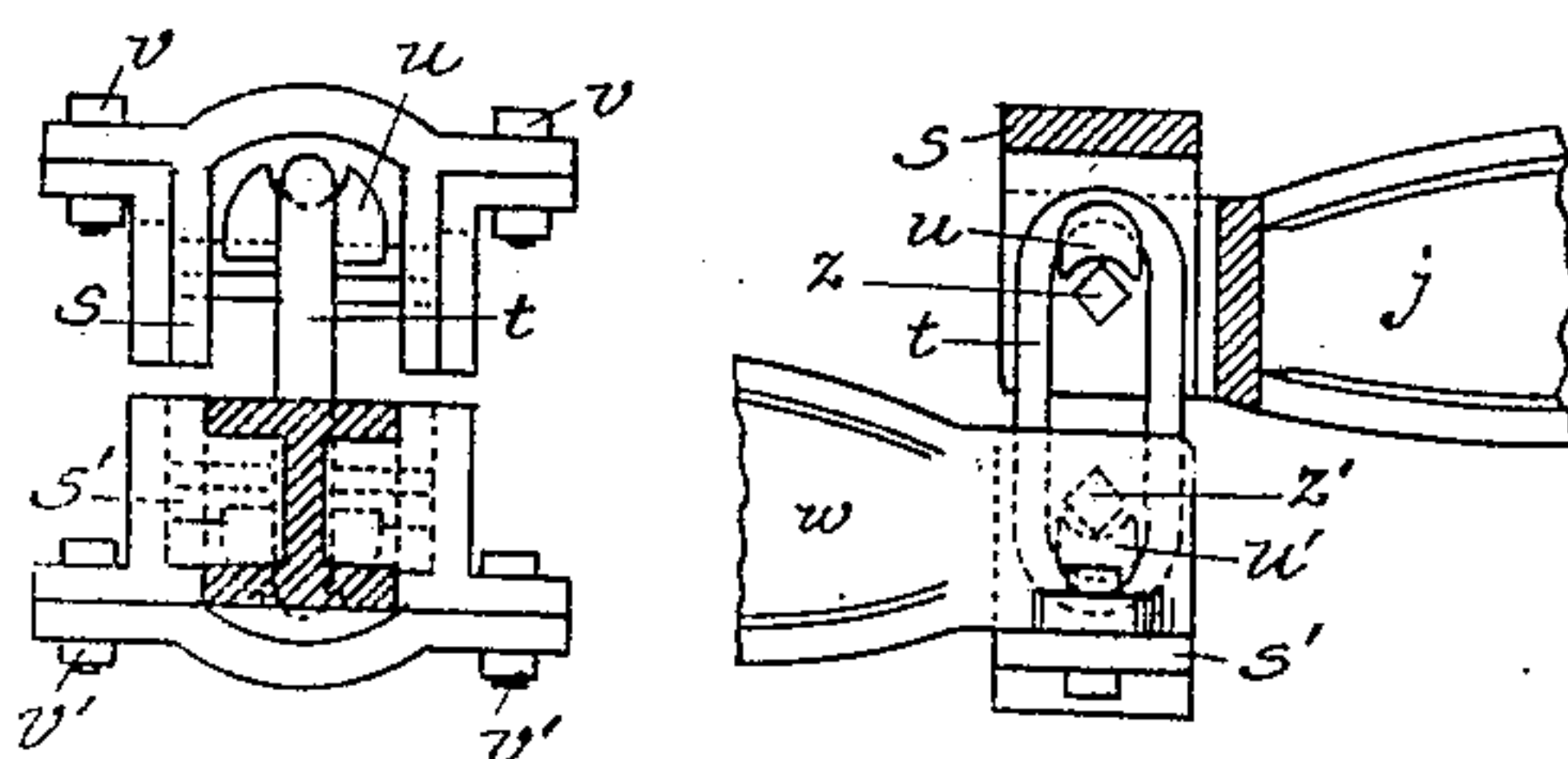
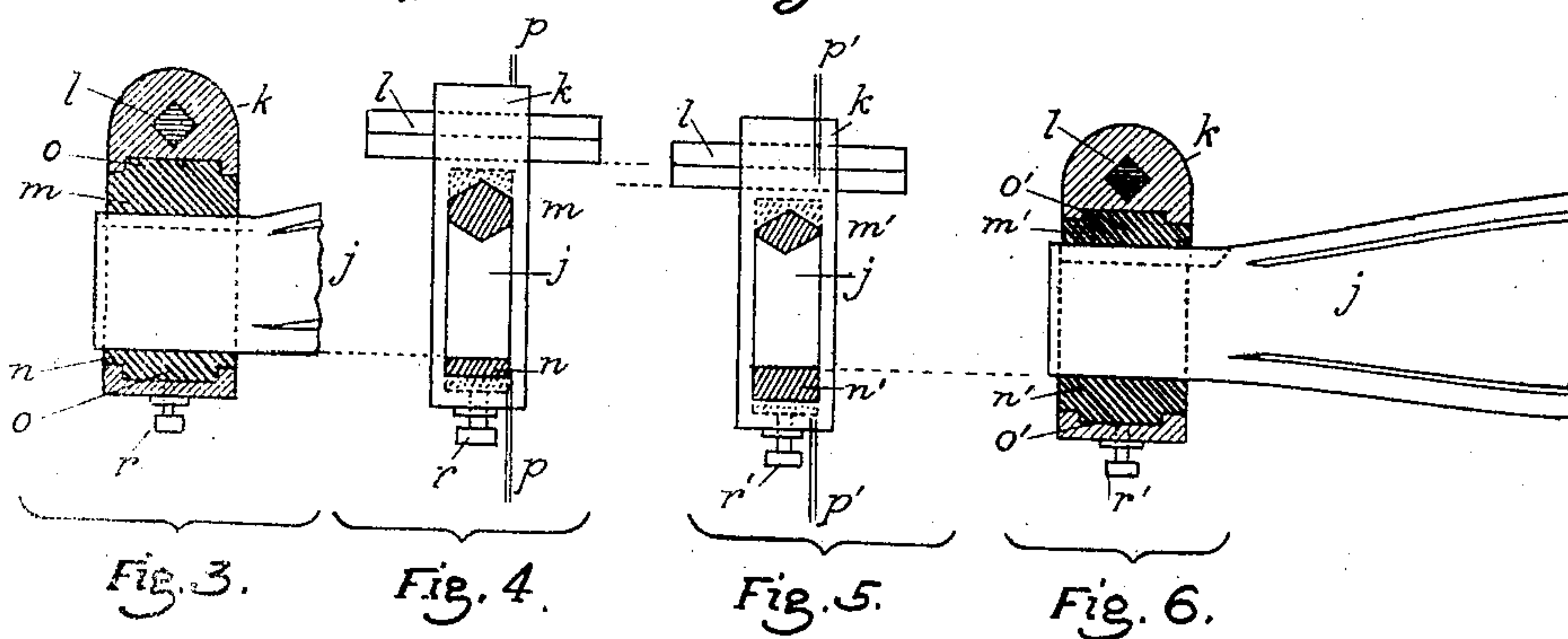
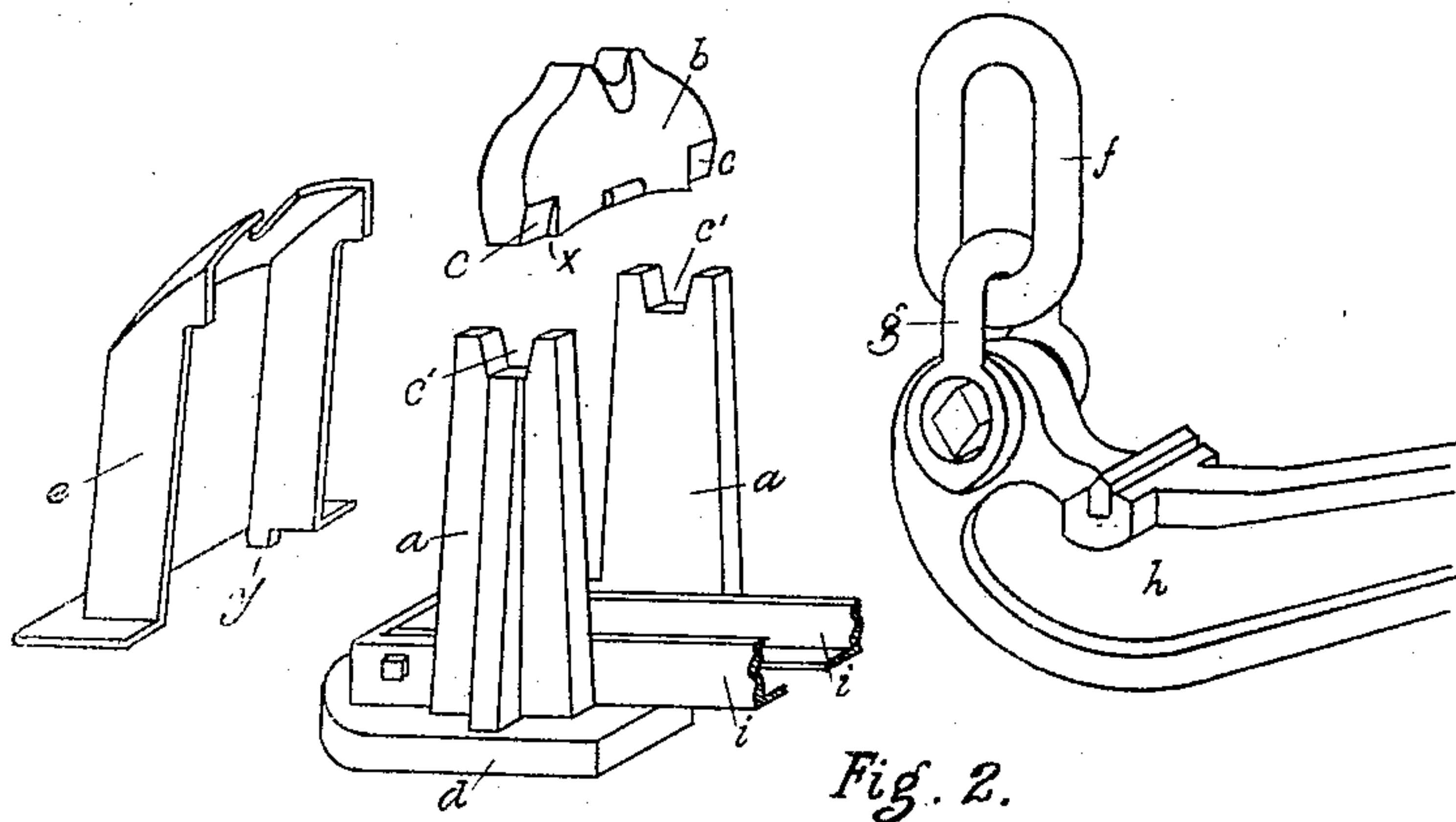
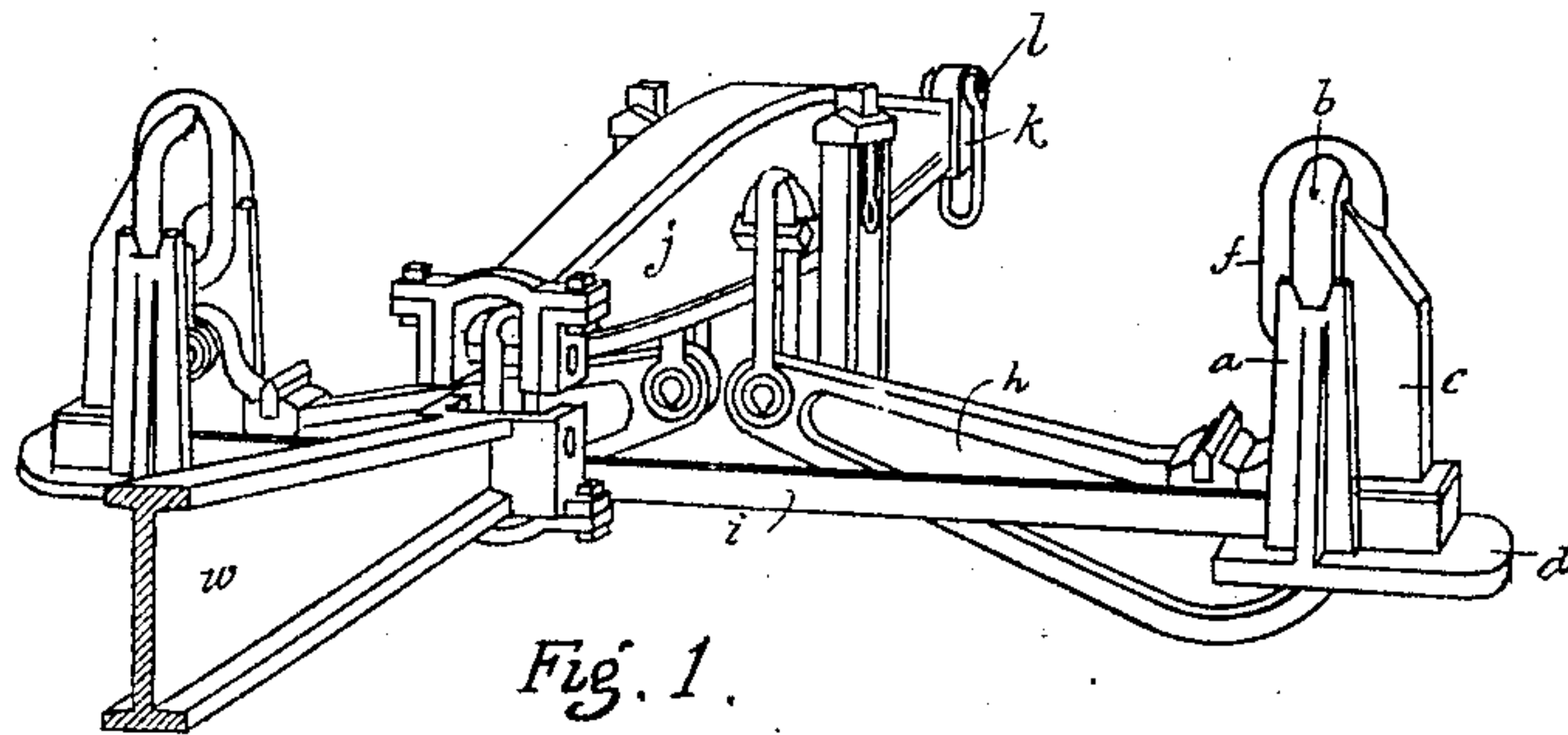


No. 824,591.

PATENTED JUNE 26, 1906.

W. H. SARGENT.
RAILROAD TRACK SCALE.
APPLICATION FILED JAN. 14, 1905.

2 SHEETS—SHEET 1.



29 June 2000

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Fig. 7.

Fig. 8.

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2 SHEETS—SHEET 2.

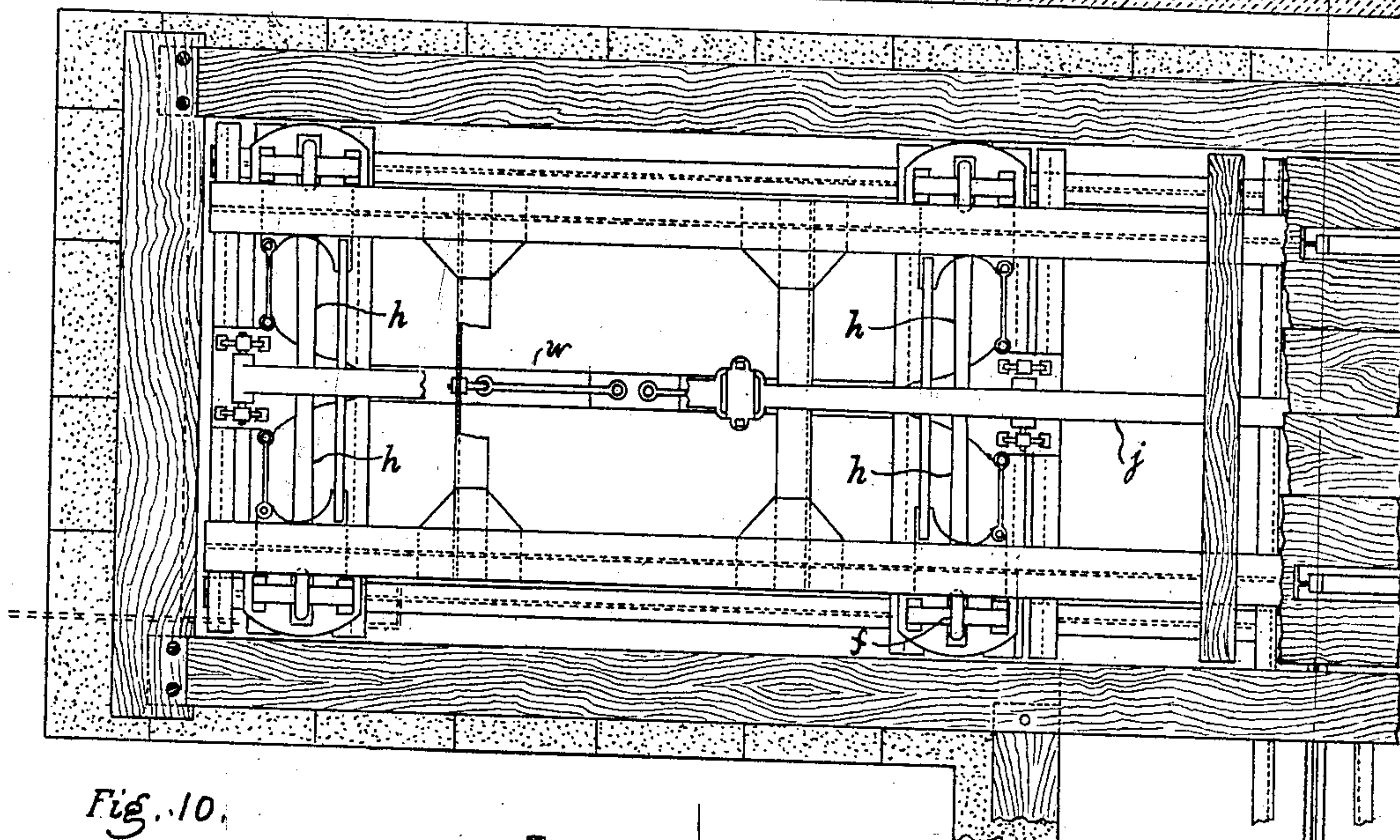
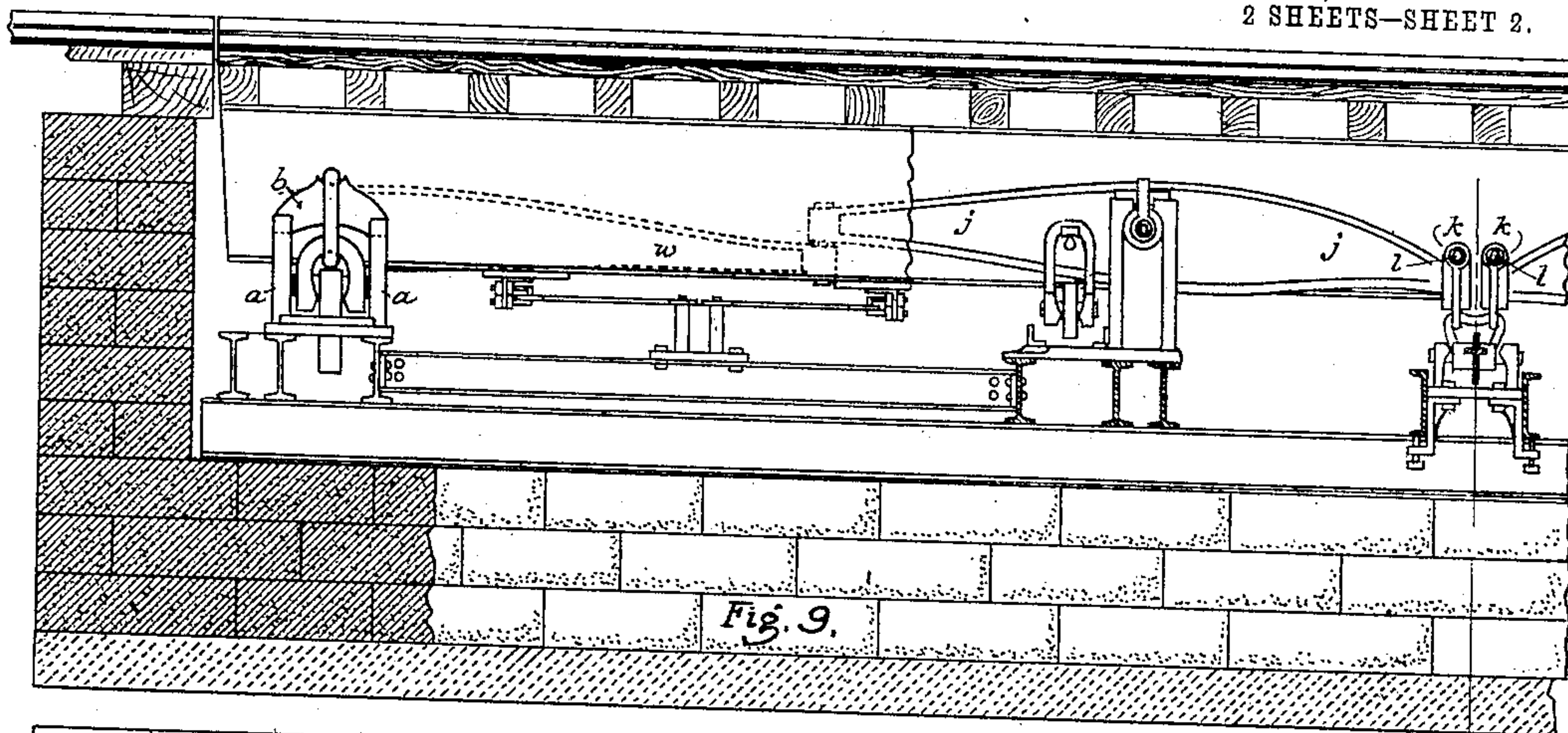
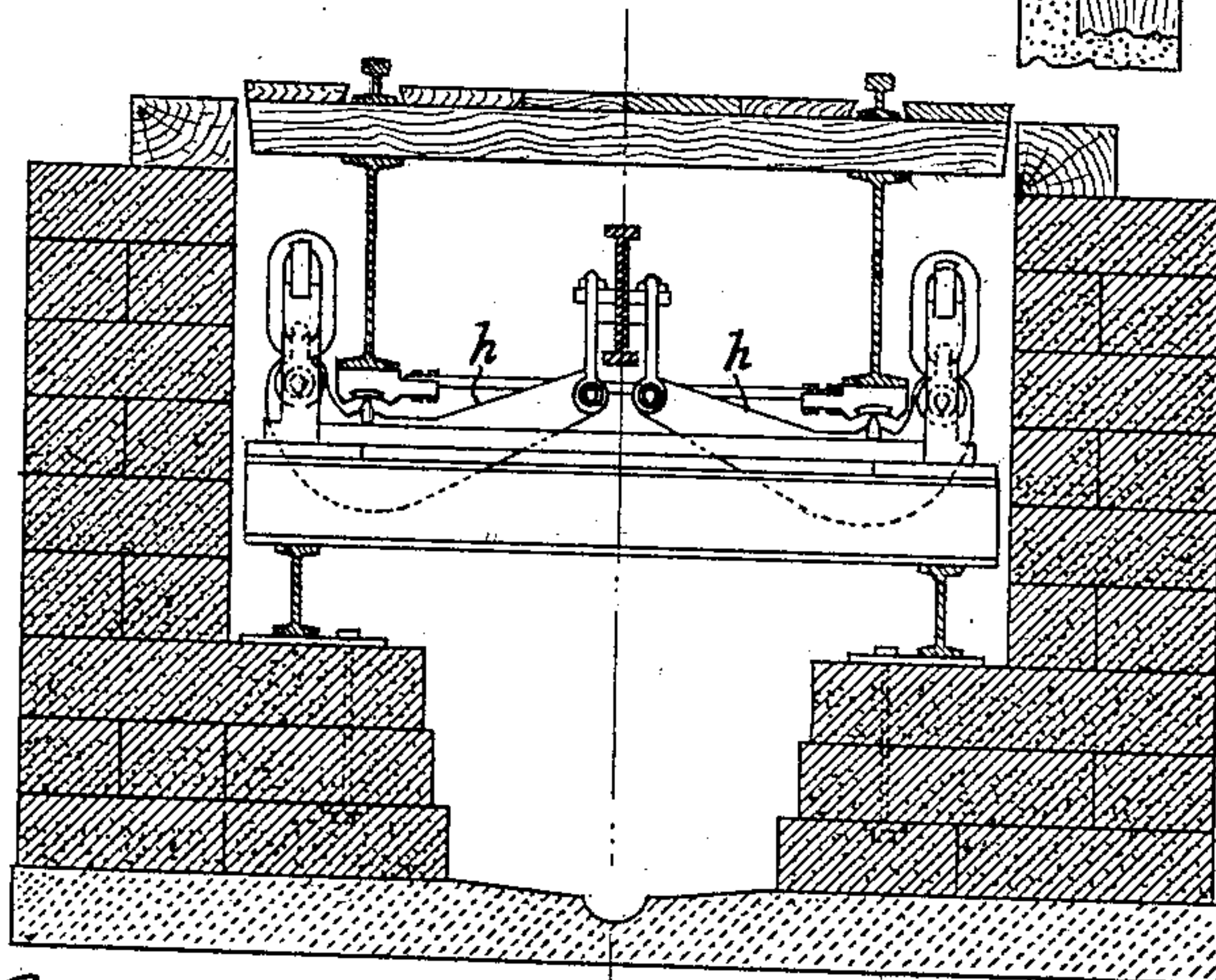


Fig. 10.

Fig. 11.



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UNITED STATES PATENT OFFICE.

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RAILROAD-TRACK SCALE.

No. 824,591.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed January 14, 1905. Serial No. 241,105.

To all whom it may concern:

Be it known that I, WILLIS H. SARGENT, a citizen of the United States, residing at St. Johnsbury, in the county of Caledonia, State of Vermont, have invented certain new and useful Improvements in Railroad-Track Scales, of which the following is a description, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My invention relates to an improvement in railroad-track scales of the well-known Fairbanks type; and it consists in novel means for supporting the main levers, for supporting and adjusting the pivots of the extension-levers, and for connecting the extension-levers.

It also includes a feature which is believed to be novel—namely, the provision of a separable stand for the main lever for allowing the ready removal of the latter.

The invention also consists in various matters hereinafter described, and referred to in the appended claims.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective detail view illustrating the general arrangement of the frame-sections of the scale embodying my improvements. Fig. 2 is a detail view of the parts of the separable stand by which one end of the main lever is supported. Figs. 3, 4, 5, and 6 represent details of construction of the means for adjusting the position of the pivot on the nose-iron which supports the extension-levers at one end thereof, Fig. 3 being a section on line *p p* of Fig. 4 and Fig. 6 a section on line *p' p'* of Fig. 5. Figs. 7 and 8 represent, respectively, end and side views of the link and saddle blocks connecting two extension-levers. Fig. 9 is a side elevation, partly in section, of a scale embodying the invention. Fig. 10 is a plan view, and Fig. 11 a cross-section of the scale on the line 11 11 of Fig. 9.

In the drawings, referring first to Figs. 1 and 2, *h* represents the main levers, suspended by loops *g* and links *f* from suitable supports, comprising posts *a a*, cast solid with the base *d* and connected with the posts supporting the opposite main lever by angle-irons *i*. The cross-bar *b* of the support from which the loop-link *f* is hung is removable from the rest of the support, thus allowing the link *f* to be detached and the main lever

removed. This cross-bar *b* is chamfered off at each end, as shown at *c c*, so as to fit into sockets *c' c'* in the posts *a a*. A slight shoulder *x* is provided at each end of the chamfer or bevel, which shoulder drops down between the posts *a a*, and thus prevents any endwise motion of the cross-bar.

To prevent dirt or water from collecting around the pivots in the main lever *h*, a removable shield *e* is provided which fits up closely around the posts *a a* and is held in place by lugs *y*, which are supported on the base *d*.

Figs. 3, 4, 5, and 6 represent in detail the manner of supporting an extension-lever, as *j*. At one end of the lever is a nose-iron *k*, bearing a pivot *l*. For various reasons in manufacturing it is desirable to have some means of adjusting this pivot both vertically and horizontally and at the same time securing it firmly in position. This is accomplished by making the opening in the nose-iron large enough to permit of putting gibs above and below the tip end of the lever *j*. Fig. 4 is an end view of the nose-iron, and Fig. 3 a section on line *p p*. Figs. 3 and 4 show a thick gib *m* above and a thin gib *n* below, thus locating the pivot edge at some distance above the lever. Figs. 5 and 6 show the reverse of this, *n'* being the thick piece and *m'* the thin one, thus lowering the position of the pivot with relation to the lever. The nose-iron *k* is recessed at *o*, Fig. 3, and at *o'*, Fig. 6, and the gibs are shouldered correspondingly, so that they cannot be removed except by taking off the entire nose-iron, which is secured in place by a set-screw *r* or *r'*. It will be noticed in Figs. 4 and 5 that the upper gibs *m* and *m'* are diamond-shaped and that both the nose-iron and the lever are shaped to match. The object of this is to preserve the alinement of the nose-iron with the lever and to prevent the pivot *l* from swinging around diagonally. It will be readily seen that by having different thicknesses of gibs the pivot may be vertically located wherever desired, and the lever may be "sealed" by moving the nose-iron horizontally, and the whole firmly secured by the set-screw *r*.

In Figs. 7 and 8 are shown details for connecting the extension-levers *w* and *j*. As shown, *s* and *s'* are nose-irons, respectively attached to the upper and lower levers *i* and

w and each carrying a pivot, (marked, respectively, *z* and *z'*.) Resting on the edges of these pivots are bearing-blocks *u* and *u'*, and these are connected by means of a link *t*,
5 which passes around both and allows the bearing-blocks to adjust themselves so as to make a bearing along the whole length of the pivots.

It has been found that the details of construction hereinbefore referred to are of considerable practical importance in the construction of railroad-track scales, and I wish to cover such details as broadly as possible.

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

1. In a railroad-track scale, the combination with the main lever with loop and link
20 for hanging the same, of a support comprising posts having sockets in their upper ends, a cross-bar beveled off at each end to fit said sockets and having a shoulder adjacent the bevel; substantially as described.

2. In a railroad-track scale, the combina-

tion with the main lever with loop and link 25 for hanging the same, of a support comprising posts having sockets in their upper ends, a cross-bar beveled off at each end to fit said sockets, and having a shoulder adjacent the bevel, and a removable shield as *e* having on 30 its under side lugs to engage with the base-piece supporting the posts; substantially as described.

3. In a railroad-track scale, the combination with a main lever and extension-levers, 35 and means for supporting the tip ends of said extension-levers, comprising a nose-iron horizontally adjustable on said lever, a pivot carried by said nose-iron and removable gibs of varying thicknesses for adjusting the vertical 40 position of the pivot with respect to the lever; substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIS H. SARGENT.

Witnesses:

J. M. PERHAM,

W. E. BLODGETT.