

# J. F. Keeler.

## Platform-Scale.

N<sup>o</sup> 74696

Patented Feb. 18, 1868.

Fig. IV.

Section thro. C.D.

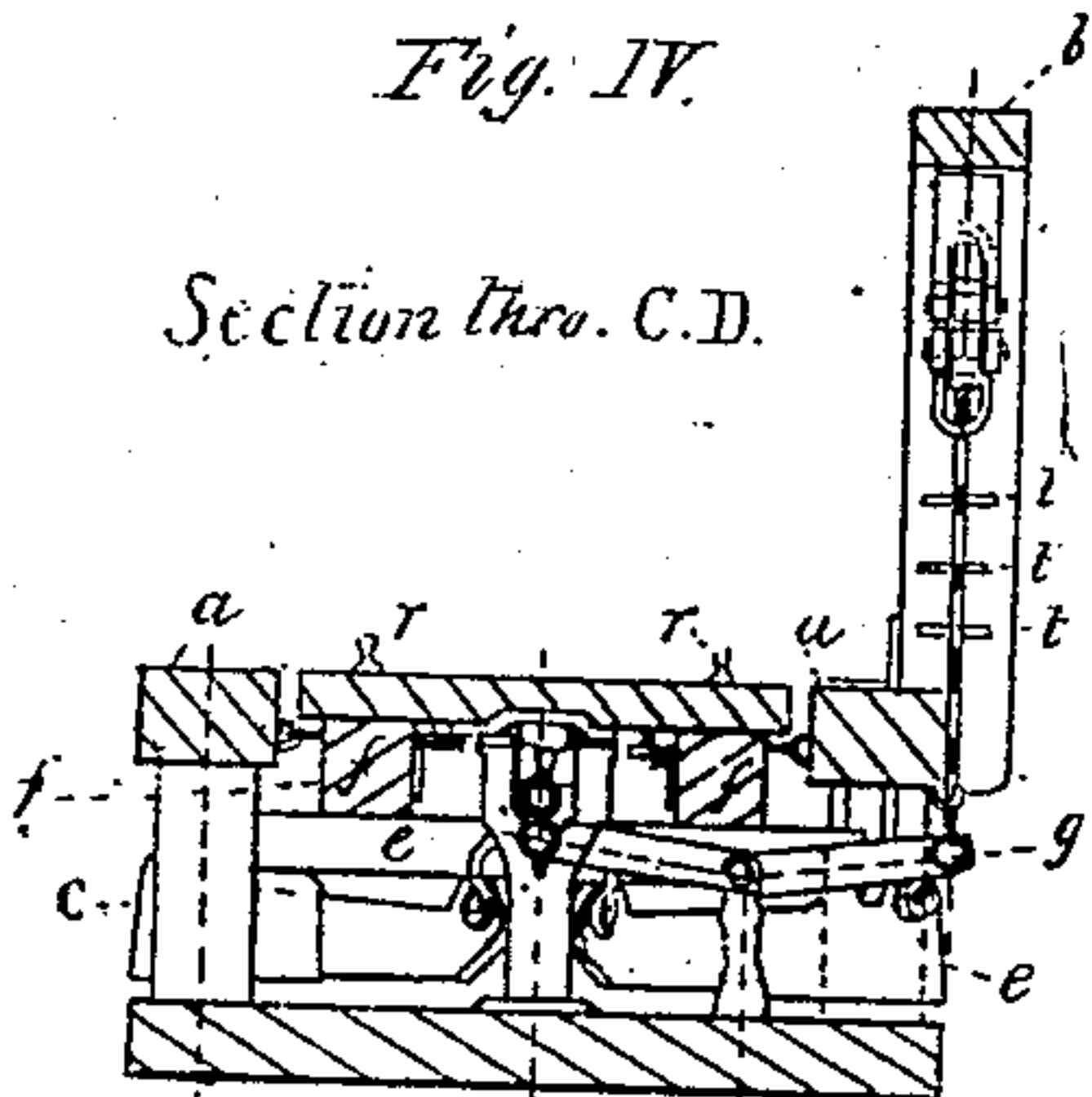


Fig. III.

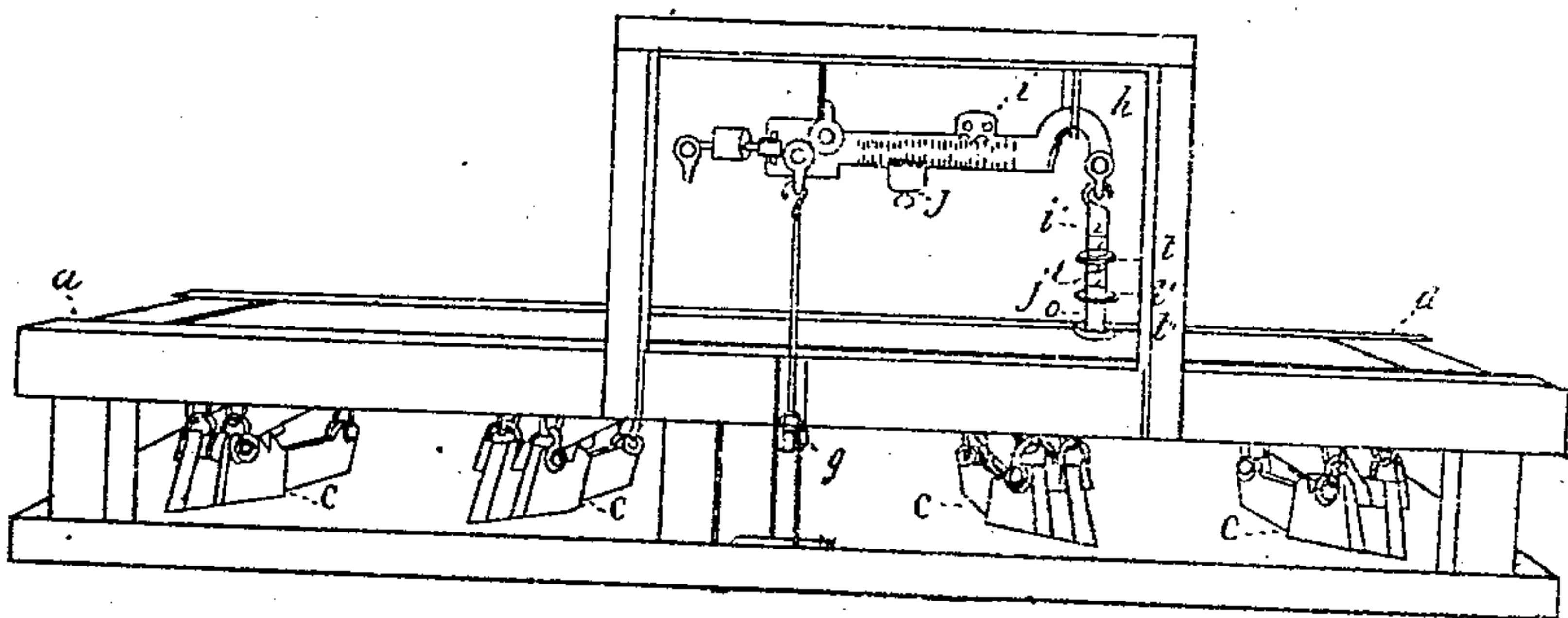


Fig. V.  
Section thro. E.F.

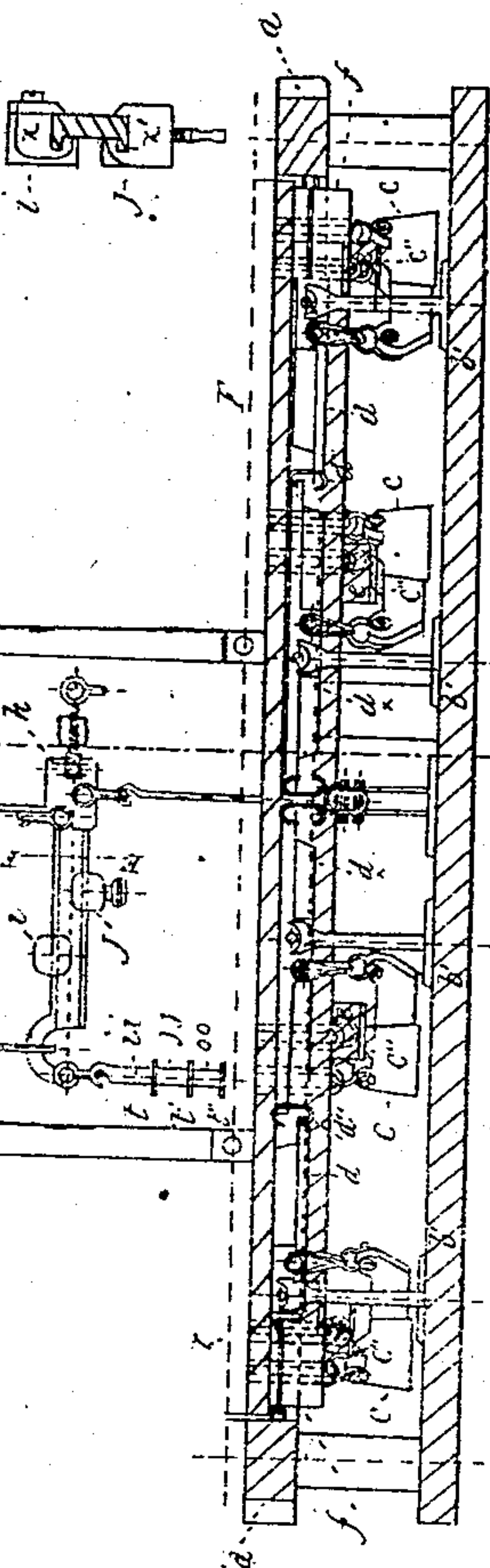


Fig. I

Section thro. A.B.

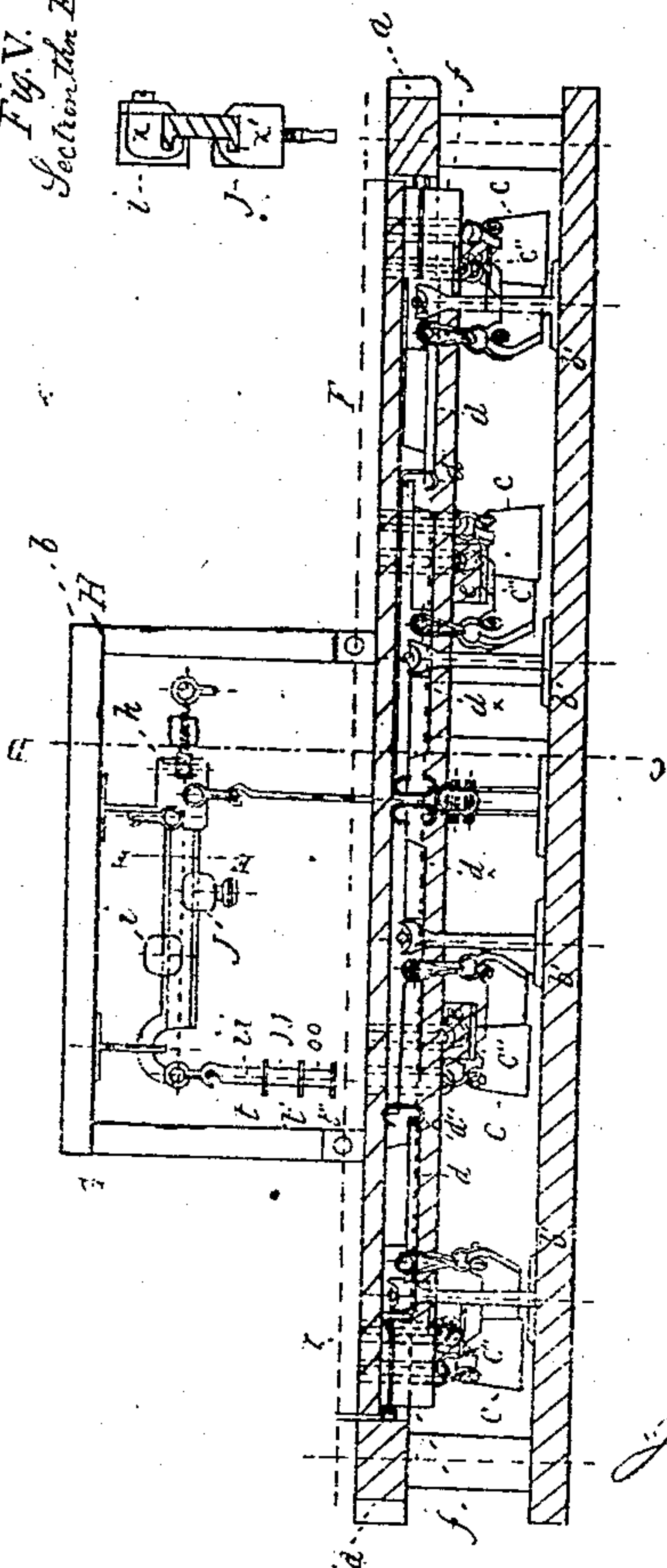
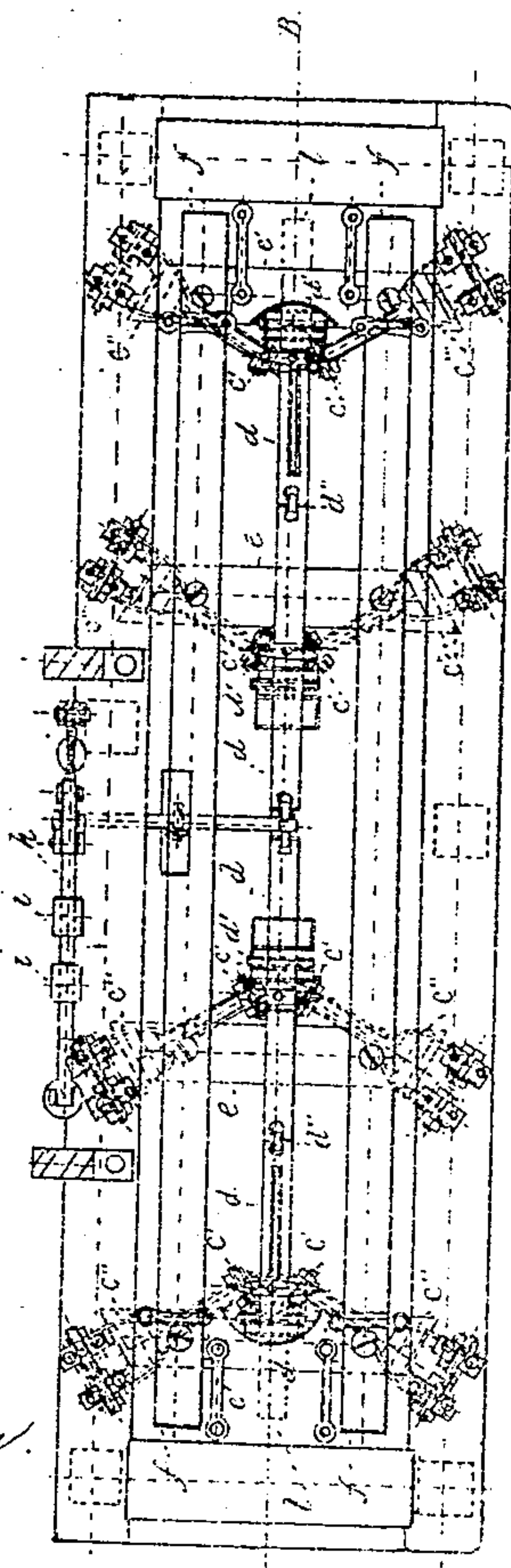


Fig. II.

Section thro. G.H.



Witnesses

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JOEL F. KEELER, OF PITTSBURG, PENNSYLVANIA.

*Letters Patent No. 74,696, dated February 18, 1868.*

## IMPROVEMENT IN PLATFORM-SCALES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOEL F. KEELER, of Pittsburg, in the State of Pennsylvania, have invented a new and improved Mode of Constructing Railroad-Track and other Scales having great length of platform; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in such an arrangement of the levers of the scale in relation to each other and to other parts as will permit the scale to be made of great length, yet compact, and with as little depth of pit as possible, while at the same time the several parts are far enough apart to avoid hitting against each other in use, or freezing together in winter in exposed situations.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my platform-scales in every known way required for use, with graduate-beam, counterpoise, weights, &c., and of every known material or combinations thereof, but I usually prefer to make the frame  $a$  for large scales (for which this construction is particularly adapted) of durable timber. The levers I also prefer to make chiefly of wrought iron. The main or platform-levers or arms,  $c$ , I construct in every known form, but, in order to permit the cross-timbers  $E\ e'$  (which rest their ends on the platform-bearings in these levers at  $e''$ ), to pass by the studs  $b'$ , I connect the main levers  $c$  with the longitudinal levers  $d$  at a considerable angle (111° or more) by means of the pivots at  $c'$ , one pivot being in the main lever, and the other in the central lever, with connecting-links between them.

In order to have suitable space for the central or secondary levers  $d$  to pass free over the cross-timbers  $e'$ , as shown at the red lines  $l$ , which becomes necessary when constructing long railroad-track scales, I place all the central levers  $d$  on about the same horizontal plane, as is specially shown in Figure I, rendering them less likely to be depressed against the cross-timbers when a heavy load is placed on the scale, or to become connected to them by ice in winter.

I accomplish this horizontal arrangement of the central levers by having the studs  $b'$ , on which they rest, of uniform height, and by placing the pivots at  $d''$  above and below each other, according to their respective position for bearing and connecting them with links, as shown at  $d''$ , Figure I. The beam-lever  $g$  is connected by similar links and pivots to the central levers, which transmit their pressure to the beam  $l$  by obvious connections.

I am aware that scales have been constructed with diagonal levers, and with levers resting in a horizontal plane; I do not, therefore, claim these features broadly, but

I claim constructing long platform-scales with a series of diagonal main or platform-levers, when such levers are connected with a series of four or more secondary levers, which secondary levers rest nearly or quite on the same horizontal plane with each other, substantially in the manner and for the purposes described.

JOEL F. KEELER.

Witnesses:

FRED. METZGER,  
HENRY REINING.