No. 651,565. Patented June 12, 1900.

E. FINN.

SCALE LOOP.

(Application filed Dec. 27, 1897.)

(No Model.)

Fig. 1.

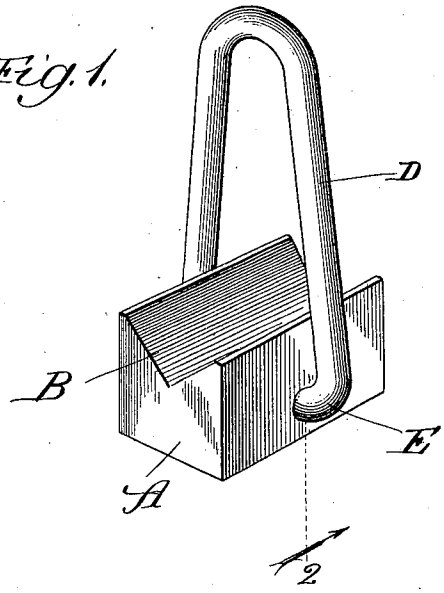
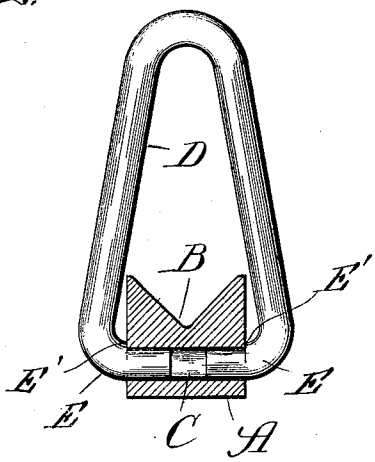


Fig. 2.



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UNITED STATES PATENT OFFICE.

EDWIN FINN, OF ELKHART, INDIANA, ASSIGNOR TO THE STIMPSON COMPUTING SCALE COMPANY, OF SAME PLACE.

SCALE-LOOP.

SPECIFICATION forming part of Letters Patent No. 651,565, dated June 12, 1900.

Application filed December 27, 1897. Serial No. 663,582. (No model.)

To all whom it may concern:

Be it known that I, EDWIN FINN, a citizen of the United States, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented a new and useful Scale-Loop, of which the following is a specification.

My invention relates to an improvement in the class of scale-loops which have a block-bearing journaled in the ends of a loop-shaped band or clip. A scale-loop of this nature has been heretofore contrived and has gone more or less into use; but in the scale-loop to which I have reference the loop is secured to the block-bearing through the medium of pins, which are journaled in the loop ends and in the ends of the bearing-block. It is found in practice that the friction, which is a necessary incident to such a construction of scale-loop, very materially interferes with the utility of the device; and the object of my invention is to produce a scale-loop which with all the advantages of that heretofore in use shall also present the advantage of substantial avoidance of all friction. The particular form of the block is subject to change according to the requirements of use—that is to say, it may be of general cubic form with a V-shaped recess in one face only, or V-shaped recesses in opposite faces, or curved recesses in either face, or of the same or different depth in the upper and lower faces, respectively. It is essential, however, that the lateral edges of the bearing-block shall be of a nature to enable the block to move freely in the journals afforded in the manner hereinafter described, and to this end I prefer to make the side of the block smooth.

My invention consists in the general and specific details of construction and combination of parts, all as hereinafter set forth.

In the drawings, Figure 1 is a perspective view of a scale-loop embodying my improvements, and Fig. 2 a vertical central section taken on the line 2 of Fig. 1 and viewed in the direction of the arrow.

A represents the bearing-block, having in its upper face the V-shaped recess B. The block A has the transverse perforation C, Fig. 2, which may extend entirely through the block or may extend part way into the same from each side.

D represents the loop, which, instead of being formed, as has heretofore been usual, of a uniformly-flat piece of metal or a piece of metal which though round or rounded in the body is flattened at the ends, is made, preferably, of a uniformly-round piece of metal, but may, if desired, be made flat in cross-section at all points except the extremities, where it is round. The loop D has at each end the turned-in bearing portion E, and by preference I form the bearing portion E with the shoulders E'. The dimension of the loop D is such that when the bearing extremities E are forced as far as the shoulders E' into the transverse perforation C in the block the latter will have free rotary motion upon the bearing with no other frictional engagement with the loop than such as is presented by the turned-in bearing ends E and the shoulders E'.

I have found in practice that a scale-loop constructed in accordance with my invention as herein set forth answers perfectly all the conditions and requirements of devices of this nature, being almost entirely free from the friction which has rendered this species of device heretofore objectionable.

I deem it unnecessary to illustrate the various forms that the bearing-block might assume; but it will be understood that the V-shaped recess B may be duplicated on the opposite side of the block or the recess may be curved instead of V-shaped and may assume the same or a different shape if both faces be recessed.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a bearing-block socketed transversely above its base, of an open-ended loop permanently held to the bearing-block, the free ends of said loop seated in the sockets a distance sufficient only to afford journals, substantially as described.

2. The combination with a bearing-block socketed transversely above its base, of an open-ended loop permanently held to the bearing-block, the free ends of said loop being shouldered and seated in the sockets as far as the shoulder to afford journals, said ends being free from contact with each other, substantially as and for the purpose set forth.

EDWIN FINN.

In presence of—
M. J. FROST,
R. T. SPENCER.