

C. W. WALDRIP & G. D. POPE.
TRUING GAGE.

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913,331.

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Fig. 1.

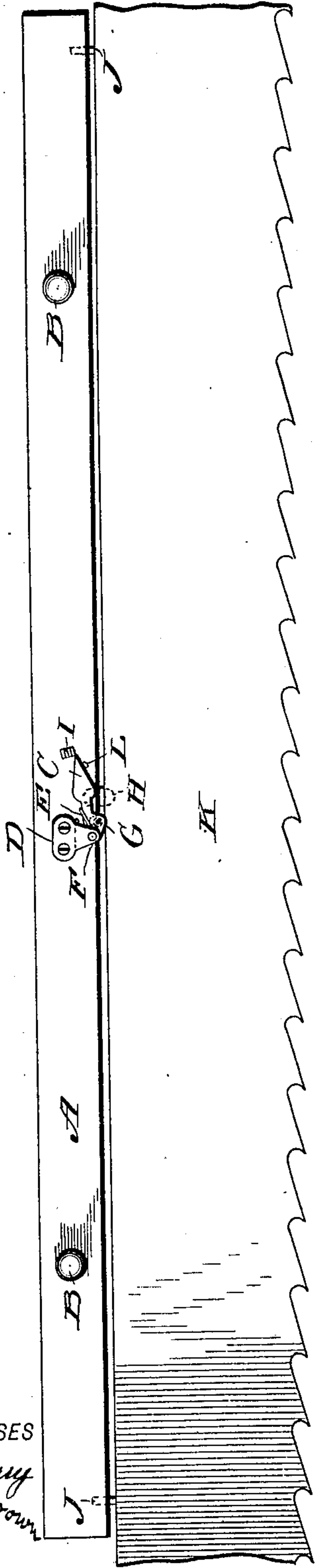
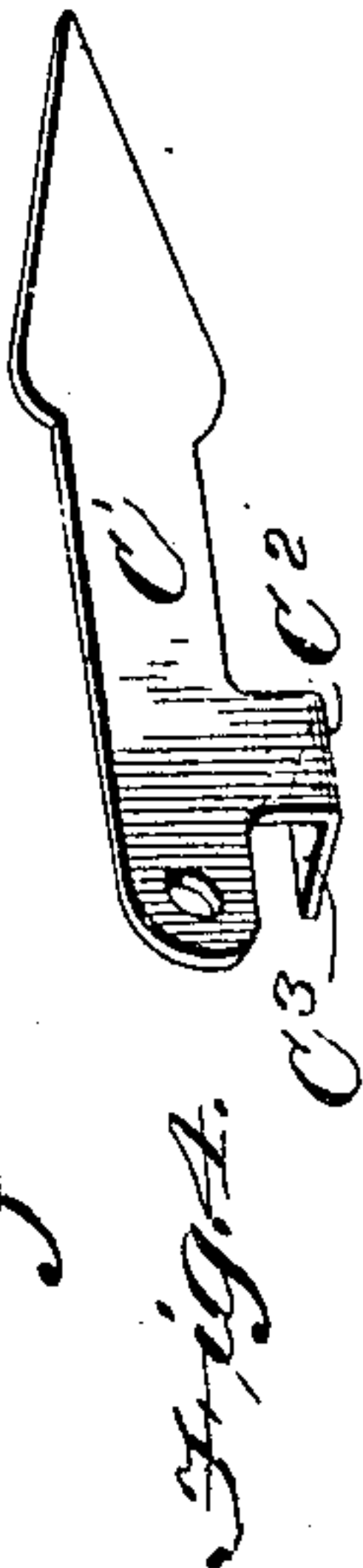
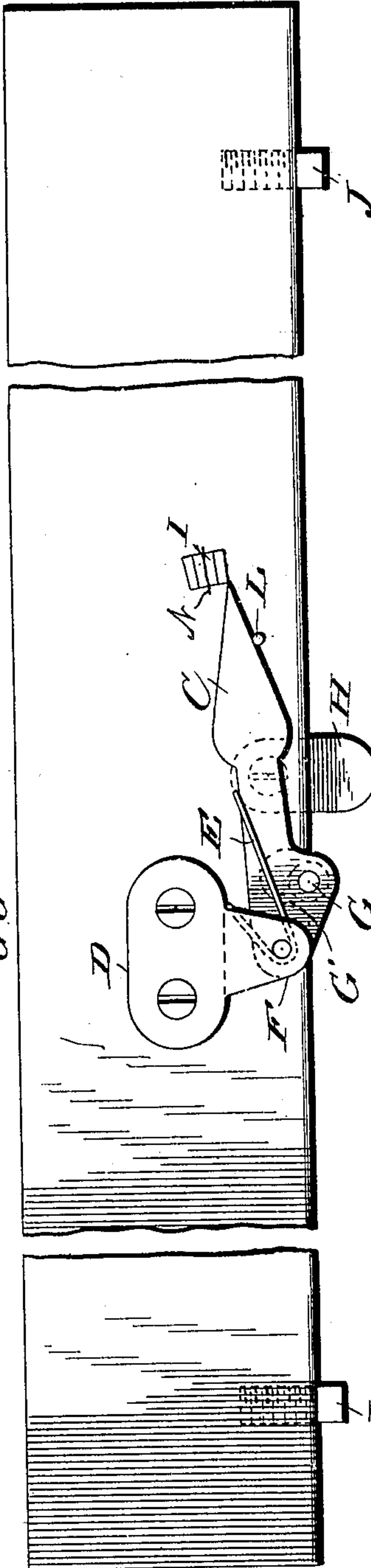


Fig. 3.



Fig. 2.



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TRUING-GAGE.

No. 913,331.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, CHARLES W. WALDRIP and GEORGE D. POPE, citizens of the United States, and residents of San Pedro, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Truing-Gages, of which the following is a specification.

This invention is in the nature of a device for gaging the back edge of saws, particularly the back-edge of band saws, and has for its object, a new and improved device which shall not only be portable in character, but simple in construction and effective in use for application to the back edge of a band saw, while it is in place on the bench.

It is well known that with a band saw, to obtain the best results it should be convex on its back edge. It is further known that due to constant, or prolonged use, and through sharpening operations of a saw, its front or cutting edge, becomes longer than the back edge, and thereby rendering the back edge into dished or concave form wherefrom the saw is rendered practically useless.

The prime object of our invention is to provide a portable device adapted for testing the back edge of a band, or similar saw, while it is in use on the machine, or removed therefrom as the occasion may be, and to the end stated we have invented the improved truing gage, shown by the accompanying drawing, and hereinafter fully described, the features of novelty being pointed out in the appended claims.

In the drawing, Figure 1 is a view illustrating the use of our improved truing gage. Fig. 2 is an enlarged view of the truing gage. Fig. 3 is a bottom edge view of our truing gage, and Fig. 4 is a perspective view of a modified form of the hand or pointer, forming a part of our invention.

In the practice of our invention we employ an elongated bar A, having parallel longitudinal side edges, substantially as shown.

To facilitate handling of our truing gage, we arrange handles B, on the bar A, preferably locating one thereof near each end of the bar, as illustrated by our drawing. On the bar A we provide a hand, or pointer C and pivotally attach one end F thereof to a block, or bracket D rigidly secured on one side of the bar A, or the block D may be integral with the bar, as obviously would be within the scope of the invention. The hand or pointer C is forced to swing on its pivotal

attachment, by means of a projecting spring E secured to the block or bracket D, and arranged with its other end bearing on the upper side of the pointer C, as shown, but obviously we do not restrict ourselves to such particular form of spring tension, as the same may be variously constructed and in fact, in some instances or particular use of the truing gage, the pointer may be constructed to operate simply by gravity. The stops or pins J are as wide as the thickness of the bar so as to engage with the saw blade at all times but the lug H extends only part way to the top of the bar so as to permit of the saw blade resting upon it and thereby being held up in position for being engaged by the pointer.

In the preferred construction of the pointer C, we provide it with a lateral projection G, adapted to engage the rear edge of a saw being trued or gaged, said projection G being located near the pivoted end of the pointer or hand, substantially as shown. In the lower edge of the bar A we provide a recess G', adapted to receive the projecting pin G, as best shown by Fig. 3. To facilitate application of our improved gage to the thin edge of saw-blades, we provide an outwardly projecting off-set lug H, at its lower edge, and at the ends of the bar A, we arrange lugs, or projecting pins J, adapted to contact or rest against the back edge of the saw-blade. In further carrying out our invention, an index or scale I is located on the blade A, adjacent to the path described by the free end of the hand or pointer C.

The construction of our improved truing gage will be understood from the above description, and its use being well understood, a detail statement thereof appears unnecessary, further than to say that when it is desired to test a saw, the gage is placed against the back edge thereof as shown by Fig. 1, and slide therealong the whole length of the saw, or any portion thereof which it is desired to test to ascertain if the saw-blade is out of true. Any convexity or concavity formed along its back edge will be indicated by the pointer C in its movement along the graduated scale I on the blade A. Use of our truing gage is materially facilitated by provision thereon of the handles B, and the lugs J at the end of the bar A insures proper testing engagement of the gage with the back edge of the saw, that

is, thereby the bar A is properly positioned on the saw, for effective engagement therewith, of the pin G on the pointer C.

Outward movement of the hand C is limited by a stop-pin L suitably located on the bar A. The pin is located at such a point relative to the scale that when the pointer is in engagement with a saw it will be held away from the pin with its free end intermediate the ends of the scale and adjacent to what we will call the zero or normal point, which is indicated in the drawings by extending one of the lines of the scale beyond the others as indicated at N. By arranging the parts in this manner the pointer is free to move upon either side of the normal when its pivoted end engages with the saw and will thereby indicate whether the saw is concave or convex, and how much, but when the instrument is not in use the spring will cause the free end of the pointer to move outward into engagement with the pin and thereby hold the pivoted end in position for being placed in engagement with the edge of the saw when the instrument is to be used. When the edge of the saw is concave the pointer will stand at a point between the normal, or line N of the scale, and the pin L, but when it is convex, as is generally the case, it will stand beyond the normal. This increases the utility of the instrument and enables the saw filer to remove the curvature in either direction and bring the saw back to the normal, which could not be done if there were no means provided for detecting the concavity of its edge.

In Fig. 4 of our drawing we show a hand or pointer C' more simply constructed than the pointer C shown in the other views of the drawing. In the modified form of pointer C' it is constructed with an extension C² whose end C³ is bent transversely, adapted to serve the purpose of the projection G on the hand or pointer C.

We claim:

1. In a truing gage, a bar provided with a

transverse recess in one edge and a scale on one side adjacent to said recess, projections on the recessed edge of the bar, the top of some of which is below the side of the bar provided with the scale, a pointer pivotally secured to the bar and provided with means for extending into said recess in position for being engaged by the edge of a saw engaging with said projections, the free end of the pointer being movable over said scale, a spring for forcing the free end of the pointer toward the recessed edge of the bar, and means for limiting such movement.

2. In a truing gage, a bar provided with a transverse recess in one edge near its middle and a scale on one side, projections on the recessed edge of the bar, a block on the side of the bar adjacent to the said recess, a pointer pivotally secured to said block with its free end adapted to be moved over said scale and provided with a projection adapted to extend into said recess and be engaged by the edge of a saw when it is resting against said projections, a stop adjacent to said scale, and a spring in engagement with the pointer to normally hold it against said stop.

3. In a truing gage, a portable bar provided with a scale upon one side and with a recess in one edge and with means for positioning a saw vertically and laterally relatively to said recess, a pointer pivotally secured to the bar with its free end adjacent to the scale and its intermediate portion provided with means for extending into said recess in position for being engaged by the edge of a saw when engaging with said positioning means, a spring for normally forcing the free end of the pointer toward the recessed edge of the bar, a stop for limiting said movement, and a handle on the bar for moving it.

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