

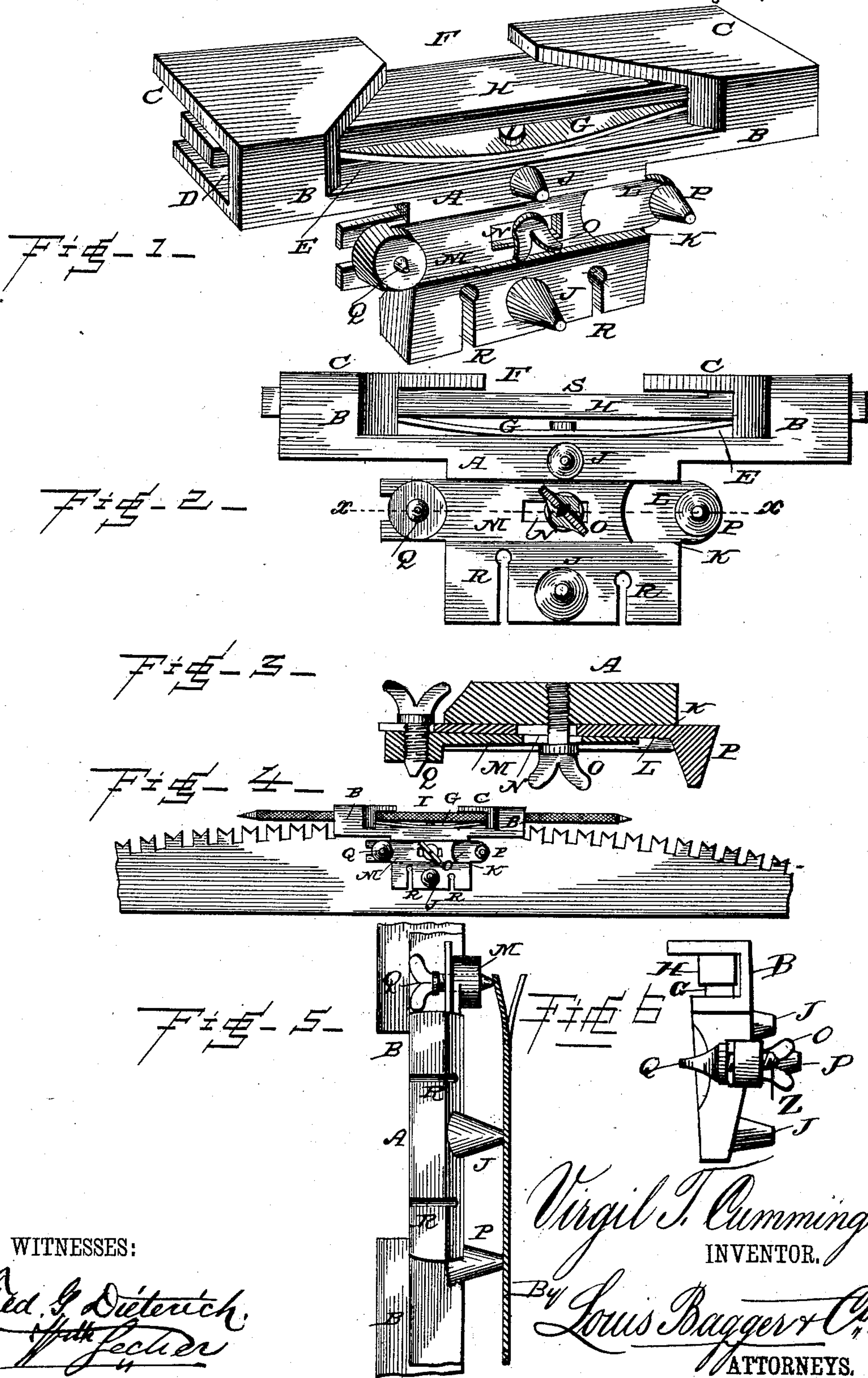
(Model.)

V. T. CUMMINGS.

DEVICE FOR JOINTING, GAGING, AND SETTING SAWS.

No. 317,442.

Patented May 5, 1885.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

VIRGIL T. CUMMINGS, OF GROVETON, TEXAS.

## DEVICE FOR JOINTING, GAGING, AND SETTING SAWS.

SPECIFICATION forming part of Letters Patent No. 317,442, dated May 5, 1885.

Application filed April 15, 1884. (Model.)

*To all whom it may concern:*

Be it known that I, VIRGIL T. CUMMINGS, a citizen of the United States, and a resident of Groveton, in the county of Trinity and State of Texas, have invented certain new and useful Improvements in Devices for Jointing, Gaging, and Setting Cross-Cut Saws; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved saw jointer, gage, and set. Fig. 2 is a rear elevation of the same. Fig. 3 is a horizontal sectional view taken on the line *x x* in Fig. 2. Fig. 4 is a rear elevation of the device on a reduced scale, showing the same applied to a saw in position for operation. Fig. 5 is an edge view showing the device applied to a saw in position for gaging the teeth of the same, and Fig. 6 is an end view of the device.

The same letters refer to the same parts in all the figures.

This invention relates to an improved combined tool or implement for jointing, gaging, and setting the teeth of cross-cut saws; and it has for its object to provide a device which shall combine the elements of cheapness, simplicity, utility, and general efficiency.

With these ends in view my invention consists in the improved construction and arrangement of parts which will be hereinafter fully described, and particularly pointed out in the claims.

Referring to the drawings hereto annexed, A designates the body of the device, which consists of a plate or block, provided at its upper edge with laterally-extending arms *a a*, the rear edges of which are provided with upwardly-extending flanges B B, having forwardly-extending plates C C, forming with the flanges B B and arms *a a* a groove or recess, D, the top and rear portion of which is provided with the slot F. It will be seen that the plates C project beyond the plane of the front edges of the arms *a* and of the front side of the plate or block A.

In the bottom of the groove D opposite the said open space is rigidly secured a flat spring,

G, between the ends of which and the plates C C may be placed the drag or gage bar H, or, when desired, a flat file, I, the operation of either of which will be hereinafter more fully described. The front side of the block or plate A is smooth and even. Its rear side is provided with a pair of studs, J J, between which is formed a longitudinal groove, K, in which are seated two plates, L M, having slots N, through which passes a set-screw, O, extending into the body of block A, and by means of which the said plates are held or retained adj-justably in the groove K. The plates L M are wedge-shaped in a longitudinal direction, their inner or adjoining ends being the thinnest, so that by sliding the said plates together or apart, as the case may be, their outer sides may be caused to approach or recede from the outer side of the body-plate. The outer end of the plate L is provided with a stud, P, corresponding to the studs J of the body-plate. The outer end of the plate M has an adjusting-screw, Q. The lower edge of the body-plate A is provided with set-notches R R of different sizes for saws of different thicknesses. The drag or gage bar H is provided with long, shallow grooves S S of unequal depth on opposite sides for the purpose of determining the length of the drag-teeth, as will be presently described.

The operation of my invention is as follows: I first place in the groove D the flat file I, as shown in Fig. 4, which file, it should be stated, must extend under the flanges C beyond the front side of the plate A. The device is then placed with the smooth side of the body-plate against the side of the saw, and with the file resting upon the points of the saw-teeth. By moving the device to and fro with an even and steady motion the saw-teeth will be jointed, or trimmed, by means of the file, to an even and equal length. This is the first stage or step of the operation. The next consists in removing the file, and substituting for it the drag or gage bar H, the width of which is such that it will not project beyond the groove D or under the flanges C C. Placing the device again with its smooth side against the side of the saw, and with the flanges C C resting upon the points of a pair of cutting-teeth adjoining a drag-tooth, the points of the latter will be exposed through the open space or slot



F, and may thus be trimmed, with an ordinary file, to an extent governed by the depth of the exposed shallow groove S in the drag-bar. The latter, as well as the file I, will be held securely, during operation, by means of the flat spring G. The next proceeding in order will be to set the teeth. The device is placed with the studs J J of the body-plate and the stud P of plate L resting against the side of the saw, and the screw Q of plate M is placed with its point against the side, near the point of one of the cutting-teeth, but turned back far enough for the desired set. The teeth are then set or bent, in the usual manner, by means of the notches R, the gage being applied as often as necessary in order to ascertain that the set is true. The sliding plates L and M may be adjusted so as to fit or adapt the device to a wide or narrow saw, as the case may be. The saw having been jointed, gaged, and set, it only remains to sharpen the teeth to a point, which being done, it will be found to be in the most perfect and satisfactory condition for work.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a saw-jointer and gage, the herein-described body-plate or block, having laterally-extending arms, a groove extending entirely through the said arms, overhanging flanges extending from the said arms, a slot in the bottom of the groove forming an open space between the flanges, and a flat spring secured in the groove, facing the flanges, substantially as and for the purpose set forth.

2. The combination, with the body-plate having the arms or extensions *a a*, flanges B B, groove D, slot F, and spring G, as herein described, of the drag or gage bar, the sides of which are provided with shallow grooves of unequal depth, substantially as and for the purpose set forth.

3. The combination of the body-plate provided on one side with outward-extending studs, and a longitudinal groove formed between said studs, of the wedge-shaped slotted plates, provided, respectively, with a stud and an adjusting-screw, and a set-screw by means of which said plates are secured adjustably in the groove of the body-plate, substantially as and for the purpose herein set forth.

4. The body-plate provided with setting-notches in one of its edges, and provided on one side with outward-extending lugs and a longitudinal groove, in combination with the wedge-shaped slotted plates, seated adjustably in the said groove, and provided, respectively, with a gage-lug and an adjusting-screw, substantially as herein set forth.

5. The herein-described improved combined implement for jointing, gaging, and setting crosscut-saws, the same comprising a body-plate having laterally-extending flanged arms, a groove extending through said arms, and adapted to receive a drag or gage bar or a file, a holding-spring secured in the groove, lugs extending from one side of the body-plate, wedge-shaped plates secured adjustably in a longitudinal groove between said lugs, and provided, respectively, with a gage-lug and an adjusting screw, said body-plate being provided with set-notches in one of its edges, and with an open space separating the flanges of its laterally-extending arms, substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own, I have hereunto affixed my signature in presence of two witnesses.

VIRGIL T. CUMMINGS.

Witnesses:

WILLIAM REID LAUGHLIN,  
WILLIAM MACO. WATSON.