

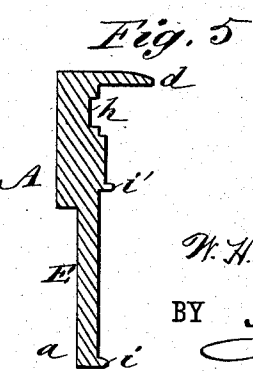
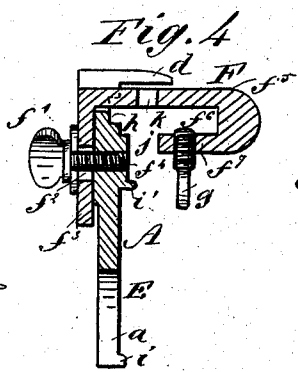
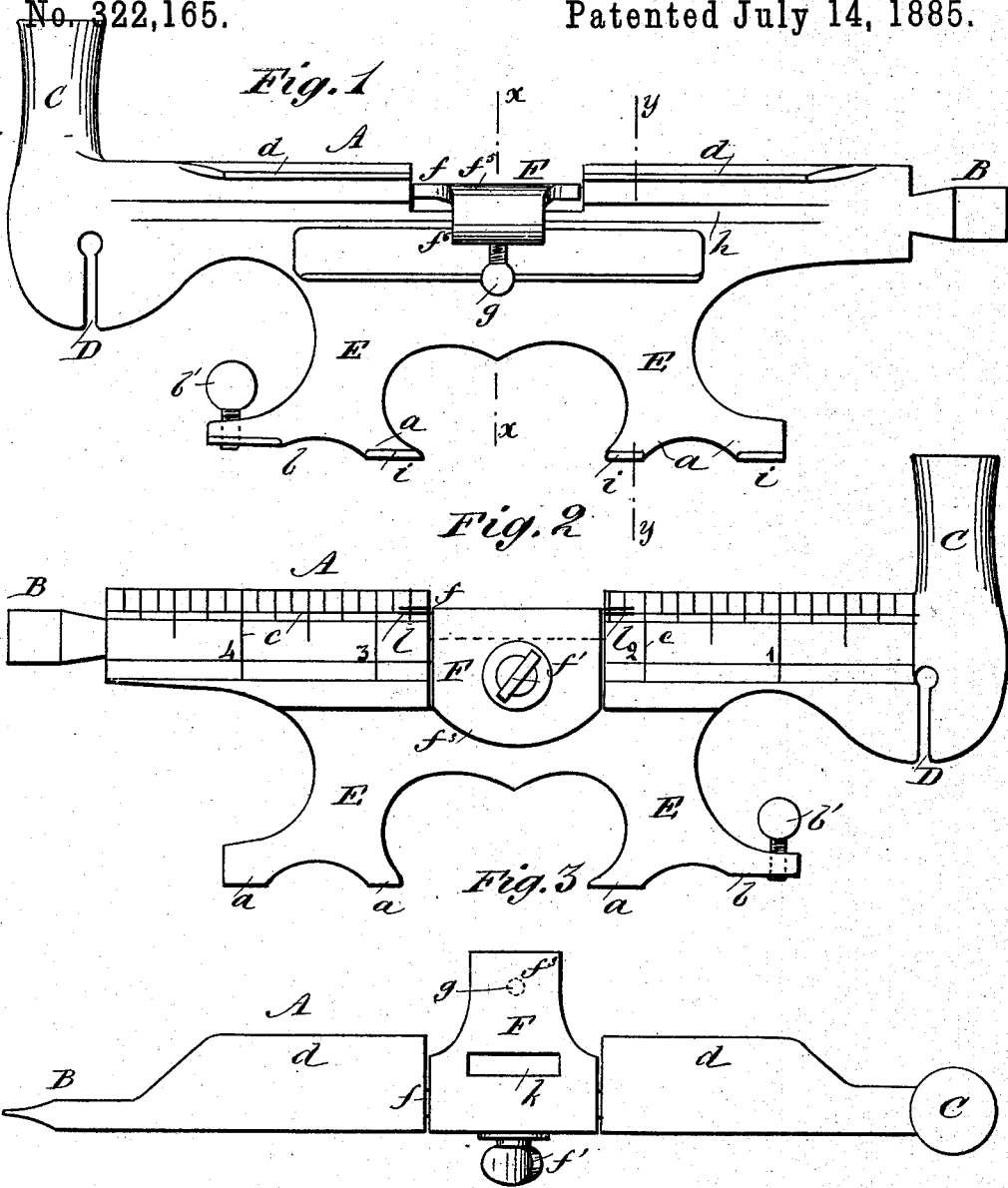
(No Model.)

W. H. DESSUREAU.

DEVICE FOR FITTING CROSS CUT SAWS.

No. 322,165.

Patented July 14, 1885.



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WILLIAM H. DESSUREAU, OF OTSEGO LAKE, MICHIGAN.

DEVICE FOR FITTING CROSSCUT-SAWS.

SPECIFICATION forming part of Letters Patent No. 322,165, dated July 14, 1885.

Application filed March 13, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DESSUREAU, of Otsego Lake, Otsego county, Michigan, have invented a new and Improved Combination-Tool, of which the following is a full, clear, and exact description.

My invention relates to a combination-tool designed more especially for fitting crosscut-saws; and the invention consists of a tool constructed as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my new and improved combination-tool. Fig. 2 is a side view of the opposite side of the tool. Fig. 3 is a plan view of the tool, and Figs. 4 and 5 are transverse sectional elevations taken respectively upon the lines *xx* and *yy* of Fig. 1.

A represents the main body of the tool. This is formed at one end with the screw-driver B, and at the other with the hammer C and slot D, which latter serves as a saw-set to bend the teeth of a crosscut-saw. At one edge the body A is formed with thin projections E, the points *a a a* of which are on the same plane, while the point *b* is set back from the line of the points *a*, and is provided with the set-screws *b'*, to serve as a gage to measure the "set" of the saw-teeth. Upon one side the body A has the graduation-marks *c* in inches and parts of inches made upon it, and upon the other side at the upper edge of the tool the body A is formed with the thin flanges *d*, which serve to support the tool upon the points of the "cutting-teeth" of the saw while the plate F is being used to gage the "raker-teeth" of the saw. The plate F is fitted in a recess, *f*, formed at the upper edge of the body A, and it is held in place by the set-screw *f'*, that passes through a slot, *f*², in the vertical plate portion *f*³ of the plate F, and enters a screw-threaded opening, *f*⁴, made in the body A. By means of the set-screw *f'* and slot *f*² the plate F may be raised or lowered as circumstances require, to suit the desired length of the raker-teeth of the saw. The horizontal portion *f*⁵ of the plate F is formed with the loop *f*⁶, to receive and hold a flat file

for filing the points of the cutting-teeth of a saw to uniform length, and the lower portion, *f*⁷, of the loop *f*⁶ is provided with a set-screw, *g*, for holding the file in place in the loop. The body A is cut back slightly, as shown at *h*, in line with the loop *f*⁶, to form a clearance or space for one edge of the file, and the points *a* of the body A are ribbed, as shown at *i*, and just below the set-screw *f'* is formed the rib *i'*, the outer edge of which is on the same plane with the ribs *i*, so that when a file is placed in the loop *f*⁶ and held by set-screw *g* the ribs *i i'* may be placed against the flat side of the saw and the file brought squarely upon the points of the cutting-teeth of the saw, (the teeth entering the space *j*), and the tool and file moved evenly along the points of the cutting-teeth to file them all to the same length. A slot, *k*, is formed in the horizontal portion of the plate F, in line above the space *j*, so that the raker-teeth of the saw may be caused to project up through this slot, so that a file may be passed over them above the plate F to file them down to the proper gage, the upper surface of the plate F serving as a guide or gage for this purpose. Upon the side of the tool that has the graduations *c* are formed the two horizontal marks, *l*, which serve as guides for setting the plate F, the lower mark being the gage for soft wood, the upper one for hard wood. The cutting-teeth of the saw being filed down to the proper length in order to "fit" the raker-teeth, the plate F will be adjusted to the proper position according to marks *l*, and secured by the set-screw *f'*. Then the tool will be placed upon the saw so that the flanges *d* will rest upon the points of the cutting-teeth, so that one or more of the raker-teeth will reach up through the slot *k*, and then a file will be applied to the points of the raker-teeth until they are filed down to a level with the upper surface of the plate F. All of the raker-teeth being treated in this manner, they will all have the proper relative length to the cutting-teeth.

In setting the cutting-teeth the slot D will be applied to them to bend them outward or inward, as required, and the degree and uniformity of set will be gaged by first properly adjusting the screw *b'* and then placing the

tool at right angles to the length of the saw against the side of the saw, so that the projections *a a* will come flat against it, and then the tool will be moved along the saw-blade with the end of the screw *b'* in line with the points of the teeth, which will indicate the degree of set of each cutting-tooth. In this manner it will be seen that with this tool and a file a saw can be easily and accurately fitted; and the tool is adapted also for use as a screw-driver, measure, and hammer, so that the tool is very useful, and it is at the same time cheap and durable.

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

1. The combination, with the body A of the tool, of the adjustable plate F, formed with the slot *k*, substantially as and for the purposes set forth.

2. The combination, with the body A, of the plate F, adjustably attached to the body A, and

formed with the loop *f*⁶, for holding a file, substantially as and for the purposes set forth.

3. The body A, formed with side flanges, *d*, in combination with the plate F, having slot *k*, substantially as set forth.

4. The body A, formed with flange *i i'*, in combination with plate F, formed with loop *f*⁶, for holding a file, substantially as and for the purposes set forth.

5. The combination-tool herein shown and described, consisting of the body A and adjusting-plate F, the body formed with flanges *d*, screw-driver B, hammer C, slot D, graduations *e d*, recess *f*, projections *a b*, the latter having set-screw *b'*, the plate F being formed with the slot *k* and loop *f*⁶, substantially as and for the purposes set forth.

Dated February 16, 1885.

WILLIAM H. DESSUREAU.

Witnesses.

G. A. MATTHEWS,
MELVIN STEVENSON.