

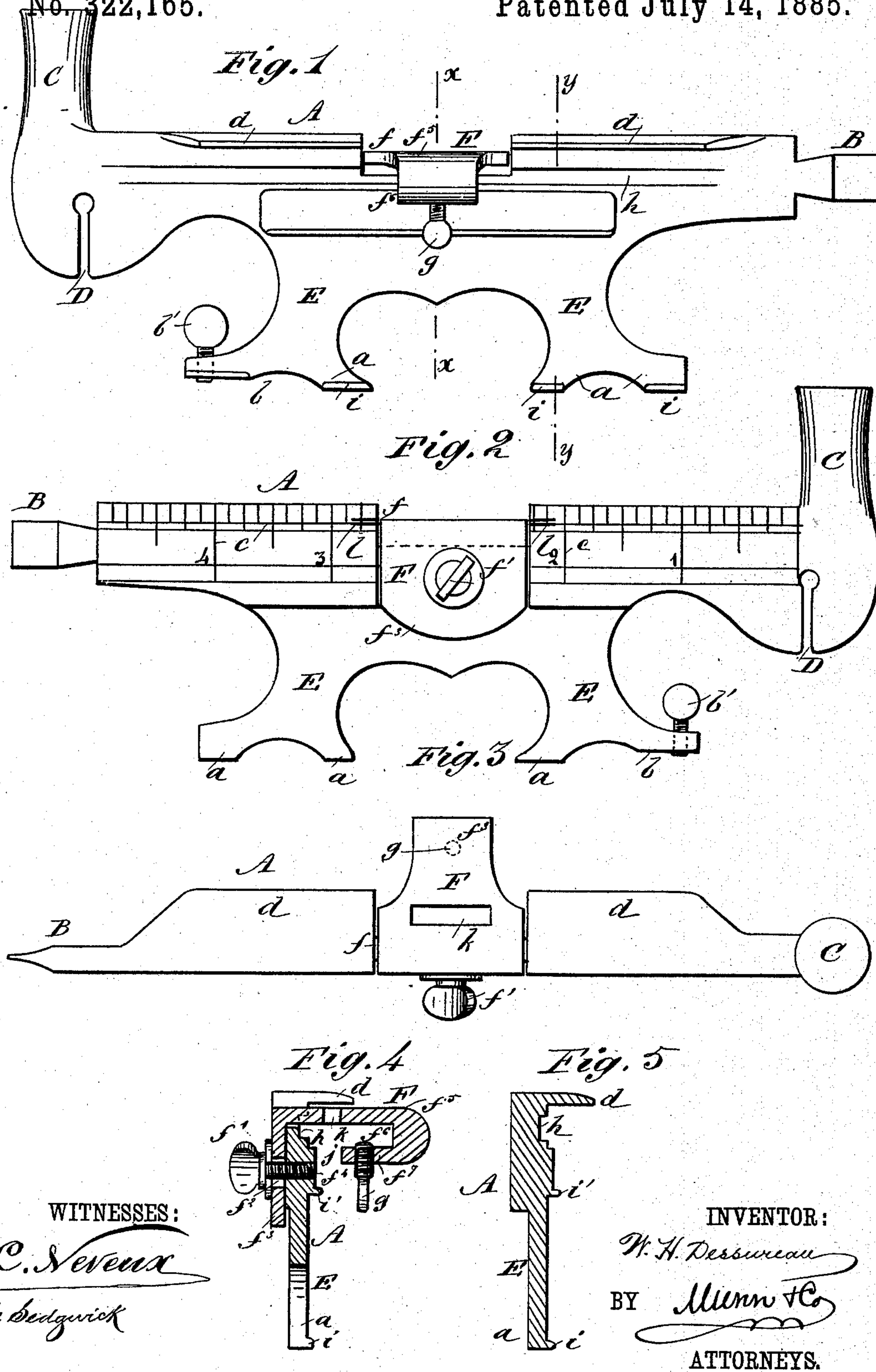
(No Model.)

W. H. DESSUREAU.

DEVICE FOR FITTING CROSS CUT SAWS.

No. 322,165.

Patented July 14, 1885.





# UNITED STATES PATENT OFFICE.

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-  
5 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.  
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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.

15 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.  
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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  
25 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  
30 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  
35 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  
40 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''*, in the vertical plate portion *f'''* of the plate F, and enters a screw-threaded opening, *f''''*, made  
45 in the body A. By means of the set-screw *f'* and slot *f''* 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'''''* of the plate F is formed  
50 with the loop *f''''''*, 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'''''''*, of the loop *f''''''* is provided with a set-screw, *g*, for holding the file in place in the loop.  
55 The body A is cut back slightly, as shown at *h*, in line with the loop *f''''''*, 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  
60 plane with the ribs *i*, so that when a file is placed in the loop *f''''''* 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  
65 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  
70 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  
75 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  
80 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  
85 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  
90 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  
95 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  
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tool at right angles to the length of the saw against the side of the saw, so that the projections *a 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'*, 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'*, 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 *c d*, recess *f*, projections *a b*, the latter having set-screw *b'*, the plate F being formed with the slot *k* and loop *f'*, substantially as and for the purposes set forth.

Dated February 16, 1885.

WILLIAM H. DESSUREAU.

Witnesses.

G. A. MATTHEWS,  
MELVIN STEVENSON.