(No Model.)

H. P. JONES.

SAW FILER.

No. 268,904. Patented Dec. 12, 1882.

Fig. 1.

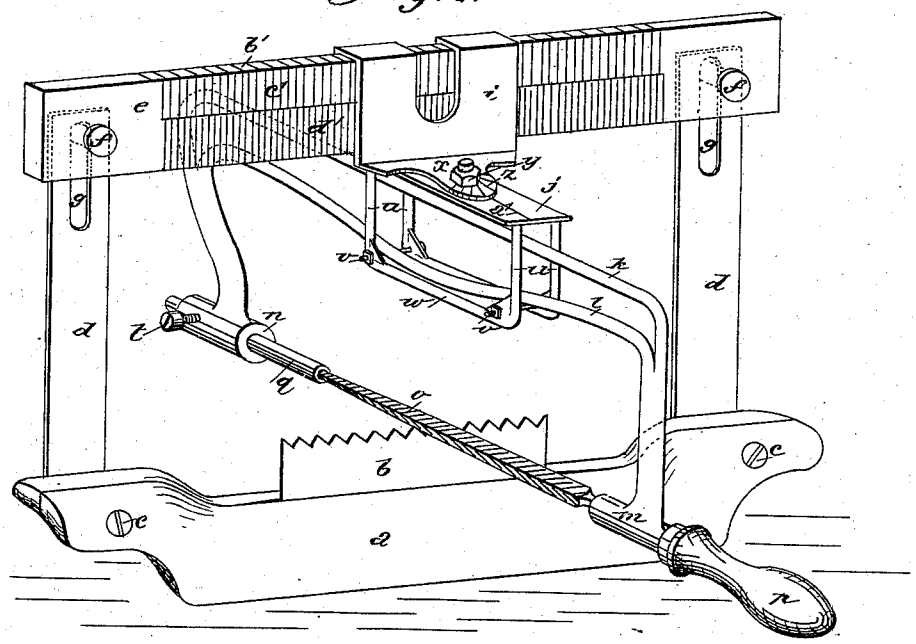
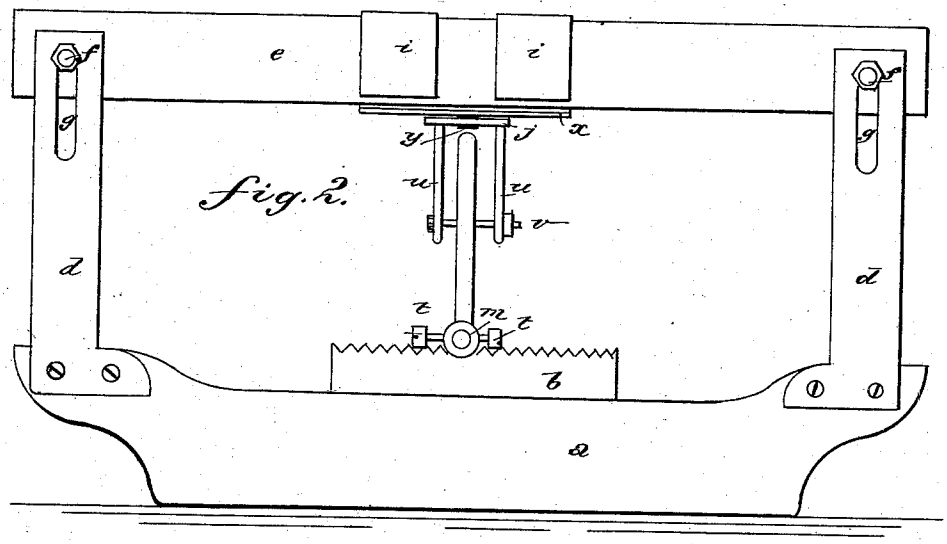


Fig. 2.



WITNESSES:

Chas. Dyer

C. Sedgwick

INVENTOR:

H. P. Jones

BY Munn & Co

ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HARVEY P. JONES, OF WINTERSET, IOWA, ASSIGNOR OF ONE-THIRD TO WILLIAM F. PAYTON, OF SAME PLACE.

SAW-FILER.

SPECIFICATION forming part of Letters Patent No. 268,904, dated December 12, 1882.

Application filed June 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, HARVEY P. JONES, of Winterset, in the county of Madison and State of Iowa, have invented a new and Improved Saw-Filer, of which the following is a full, clear, and exact description.

My invention consists of devices in combination with a clamp for holding the saw and a frame for carrying the file to gage the depth, pitch, and inclination of the teeth; and it also consists of a contrivance of the file-frame, together with a part of the gaging apparatus, whereby the file is made to run with a rising-and-falling guide, on which its frame rides from end to end of the range of the file, so that the curved edge of the file acts uniformly on the saw the whole of the length of the file, all as hereinafter fully described.

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

Figure 1 is a perspective view of my improved saw-filer, and Fig. 2 is a side elevation.

The clamps *a*, in which the saw *b* is secured by the strong screws *c*, may be of any approved form, to one of which I attach an upright bar, *d*, at each end for the support of a horizontal bar, *e*, which I mount adjustably thereon as to its height by clamp screw-bolts *f*, fitted in the slots *g* of the uprights. This bar *e* supports what I call a keeper, *i*, which supports a guide-frame, *j u v*, for the bars *k* and *l* of the bow of a file-frame to work in said frame, having sockets *m* and *n* in the ends for carrying the file *o*, socket *m* for the tang of the file, having a handle, *p*, and socket *n*, having an adjustable tube or rod, *q*, to receive the point of the file and being adjustable lengthwise and circumferentially, as required, to set the file, and having a set-screw, *t*, to fasten it.

The file-frame guide has vertical rods *u* at each end of top *j*, between which the bars *k l* run, and cross-rods *v* under rod *l*, to limit the depth of cut of the file in the notches of the saw between the teeth. They also serve, together with the curved form of rod *l*, which corresponds to the curvature of the file, to so gage the file to the saw that it so rises and falls in its traverse that it acts alike on the saw from end to end at the same time that its frame runs on the rods *v*. This action is substantially the same for all the strokes of the file, although the rod *l* may not bear quite so fairly on both rods *v* in the first strokes, for the difference in the height of the file between the first and last strokes is so slight that the action is practically the same.

The verticals *u* of the guide for the saw-frame are connected by rods *w* for stability, and the said guide is suspended from the bracket *x* of the keeper by a clamp-bolt and nut, *y*, on which the guide swivels when the nut is freed, so as to set the guide to any desired angle according to the required bevel of the teeth. The guide is then made fast by screwing up the nut. The degree of the inclination of the file may be determined by a scale, *z*, on bracket *x*, and a line, *a'*, on the top *j* of the gage,

The shifting of the file along the saw may be gaged to the pitch of the saw-teeth by scales *b' c' d'*, &c., marked on bar *e*, said scale being graduated to the pitch of different saws.

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

1. The combination, with a saw-clamp, *a*, of a bar, *e*, supported over the clamps by uprights *d*, substantially as described, for the support of a file-guide.

2. The combination, with a saw-clamp, *a*, of a file-guide, substantially as herein described, supported on a bar, *e*, located over the saw-clamp, substantially as described.

3. The combination, with a saw-clamp, of a file-guide, *j*, *u*, and *v*, supported over the clamp by a keeper, *i*, arranged to slide along bar *e*, also located over the clamp, substantially as described.

4. The combination, with a saw-clamp, of a file, *o*, mounted in a file-frame, substantially as herein described, and a guide, *j*, *u*, and *v*, for said file-frame, substantially as described.

5. The file-frame consisting of bars *k l* and sockets *m* and *n*, in combination with guide *j*, *u*, and *v* and with the saw-clamp, substantially as described.

6. The file-frame, substantially as herein described, in combination with guide *j*, *u*, and *v*, and the adjustable keeper *i*, said guide being

pivoted to the keeper and the keeper being arranged on the bar *e*, substantially as described.

7. The adjustable keeper *i*, guide *j*, *u*, and *v*, and the file-frame in combination, said guide and keeper being pivoted together and having the scale *z a'*, substantially as described.

8. The combination of the adjustable keeper *i*, file-frame guide *j*, *u*, and *v*, file and file-frame, and the saw-clamp, substantially as described.

9. The combination, with the saw-clamp, of the file-frame and the guide therefor, the bar *l* of the saw-frame being curved to correspond with the curvature of the file and arranged with relation to rods *v* of the guide, substantially as described.

10. The combination of the file-frame, file-frame guide, guide-holding keeper, and the supporting-bar for the keeper, said bar being marked with scales, substantially as described.

11. The combination of the file-frame, file-frame guide, guide-holding keeper, and the supporting-bar for the keeper, said bar being adjustable toward and from the saw-clamp, substantially as described.

12. The combination of the adjustable socket-tube *q* with the file and file-frame, substantially as described.

HARVEY P. JONES.

Witnesses:
J. L. PITZER,
J. F. LEONARD.