(No Model.)

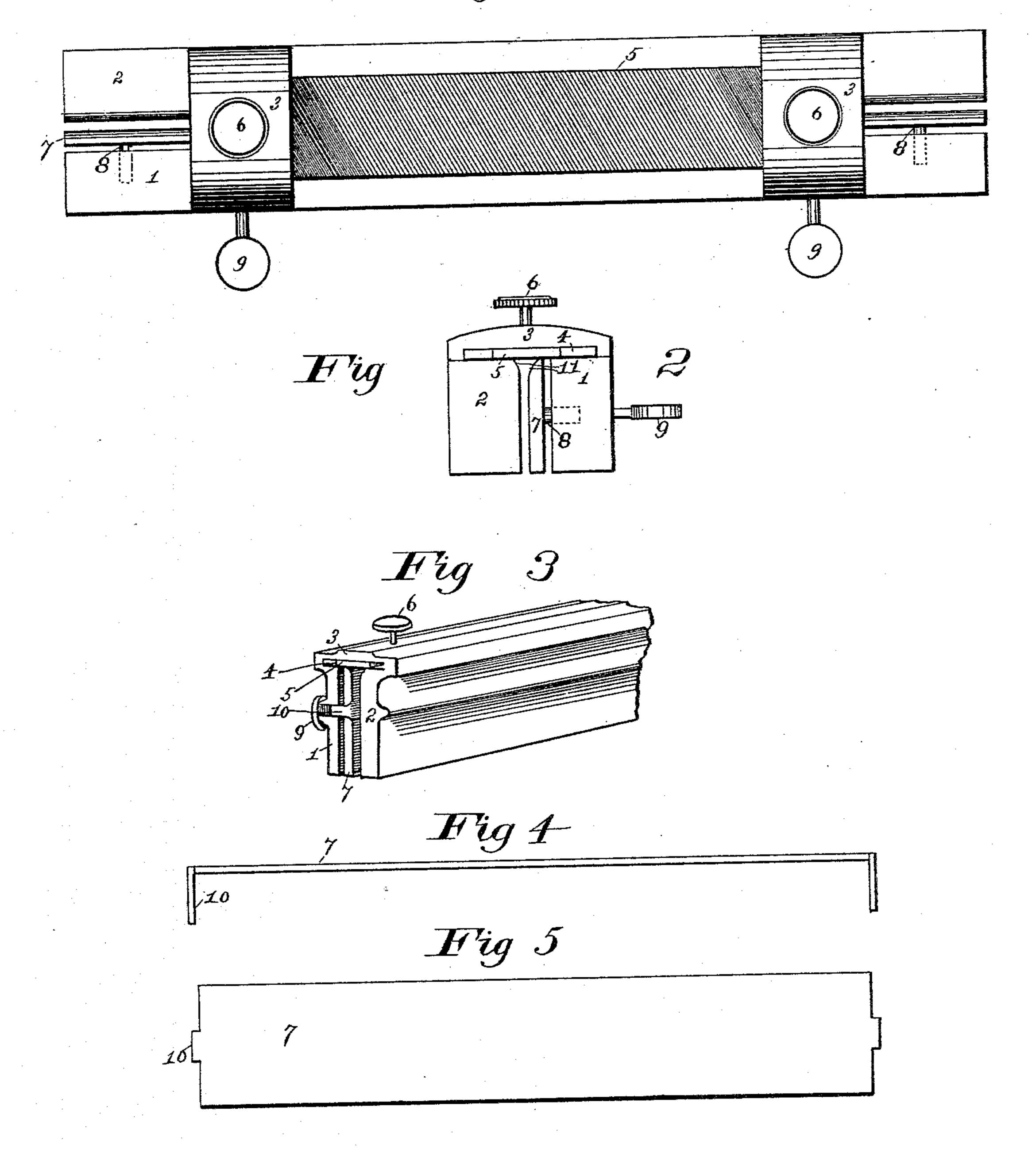
W. A. HUNTER.

SAW JOINTER.

No. 401,277.

Patented Apr. 9, 1889.

Fig 1



WITNESSES:
Slyray
Z. F. Willer

INVENTOR
Wesley Clastinter

BY RMMUL Cermoth

his

ATTORNEY

United States Patent Office.

WESLEY A. HUNTER, OF IDAHO SPRINGS, COLORADO.

SAW-JOINTER.

SPECIFICATION forming part of Letters Patent No. 401,277, dated April 9, 1889.

Application filed October 5, 1888. Serial No. 287,316. (No model.)

To all whom it may concern:

Be it known that I, Wesley A. Hunter, a citizen of the United States of America, residing at Idaho Springs, in the county of Clear 5 Creek and State of Colorado, have invented certain new and useful Improvements in Saw-Jointers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved construction and arrangement of a device termed a "saw-jointer"—that is, a device for bringing the cutting ends of the teeth of a saw into

the same line or plane.

As is well known, it is often necessary and generally desirable in sharpening saws to "joint" them—that is, cut away any ends of teeth projecting beyond the general toothline, bringing the ends of all the teeth into 20 one straight line, that each may act equally upon the material to be cut. Such jointing, however, is, when done by hand, the/file being held directly in the hands, a very delicate operation, requiring careful and steady ma-25 nipulation and a good eye, so much so that considerable care, trouble, and time are involved. Some forms of jointers have been proposed for this purpose in which a file was securely held between fixed sides, adjustable 30 gage or guide pieces being supported between the fixed sides to guide the saw as it was reciprocated over the file. There is an objection, however, to reciprocating the saw over the file, as must be done in such type of jointer, 35 arising from the fact that it is difficult to reciprocate manually a body the length of an ordinary saw in a perfectly-straight line, there being a tendency to reciprocate the edge in a curved line, to obviate which great care, at-40 tention, and skill are necessary.

The object of my invention, therefore, is to provide a simple compact device adapted to be grasped in the hand and manually reciprocated over the edge of a saw firmly clamped and held stationary, by which it may be perfectly jointed without the need of any especial training or the exercise of any especial care or delicacy in manipulation, and by the use of which perfect alignment of the teeth ones may be secured automatically, so to speak—a device readily used, durable, and re-

liable; to which ends the invention consists in the features and arrangements more particularly hereinafter described and claimed.

In the drawings I have illustrated two em- 55 bodiments of my invention, unitary in principle and general construction and differing only in minor details.

In the drawings, Figure 1 is a top or plan view of one form; Fig. 2, an end view thereof; 60 Fig. 3, a perspective view of another form; Fig. 4, a top or edge view, and Fig. 5 a face

view of a detail of Fig. 3.

In the figures the reference-numerals 12 indicate the sides or main frame-pieces of the 65 jointer. They are secured together so as to be fixed relatively to each other and at a little distance apart by the connectors or clamps 33, each having a recess, 4, in its face next the side pieces, 12, in which recesses may be 70 secured the file 5, so that its face lies over the space between the sides 12. Set or binding screws 66 take through the connectors 33 and upon the file, so that the latter may be held firmly in position and yet be capable of 75 ready detachment from or securement in its seat.

In the space between the sides 1 2 is secured a sliding intermediate gage block or piece, 7, against one side of which take the 80 ends of adjusting-screws 9 9, seated in one of the main sides 1, so that when the jointer is placed upon the saw, with the inner face of the file lying upon the teeth thereof, the piece 7 may be moved up by the screws 9 9 to such 85 distance as just permits easy movement of the blade between the gage block or piece 7 and side 2, the upper parts of the faces of which are beveled or flared outwardly, as shown at 11, to give thereat an increased space 90 to accommodate the set of the saw.

These general features of construction are the same in both forms, and the description thus far given applies to both. It is necessary that the intermediate gage-piece, 7, 95 should be secured between the sides 1 2 and yet be capable of movement between them. In the form shown in Figs. 1 and 2 guide-rods 8 8 project from the rear of gage-piece 7 and take in corresponding apertures in the side 100 piece 1, so that the securement and adaptability for movement referred to are secured.

In the other form the intermediate gage-piece, 7, has at its ends rearwardly-extending tongues or lugs 10 10, moving in corresponding recesses in the ends of the side piece 1, attaining the same results, the intermediate gage block or piece being secured in position in both forms by attached guide-rods.

In practice it is preferable that the recesses 4 be somewhat wider than the files to be used, when the file may be moved to change the portion of its face lying over the space between side 2 and gage-piece 7 and to distrib-

ute the wear over its face.

In operation, the saw being fixed toothed edge up in any suitable vise or clamp by which it may be firmly held, the gage-piece 7 is retracted until the space between it and side 2 is sufficient to permit the jointer to be placed upon the saw. It is then moved forward until the space is just sufficient to permit the jointer to be moved along the sawblade without binding or undue friction thereon. The jointer is then reciprocated along the edge, the file taking upon the teeth ends, and extending, as it does, over many teeth, bringing their ends into perfect alignment. At the same time, as the file is held rigid and

at a right angle to the sides, and as they are maintained parallel to the blade, the filing is at a true right angle to the web of the blade. 30 Thus perfect jointing is secured, and that without extraordinary skill or care.

Having thus described my invention, what I

claim is—

1. A saw-jointer adapted to be grasped in 35 the hand and reciprocated over the edge of a saw, consisting of the side pieces or frames fixed relatively to each other, connectors or clamps uniting them and adapted to hold a file, an intermediate sliding gage or guide-40 piece, ways for it to slide or move upon, and means for adjusting it, substantially as set forth.

2. A saw-jointer consisting of side pieces, 1 2, clamps 3, with set-screws 6, sliding piece 45 7, having guide rods or arms, and the adjusting-screws 9, substantially as set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

WESLEY A. HUNTER.

Witnesses:

Z. F. WILBER, R. M. McDermott.