

G. W. CURBY,
SAW GAGE AND FILING CLAMP.
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1,057,806.

Patented Apr. 1, 1913.

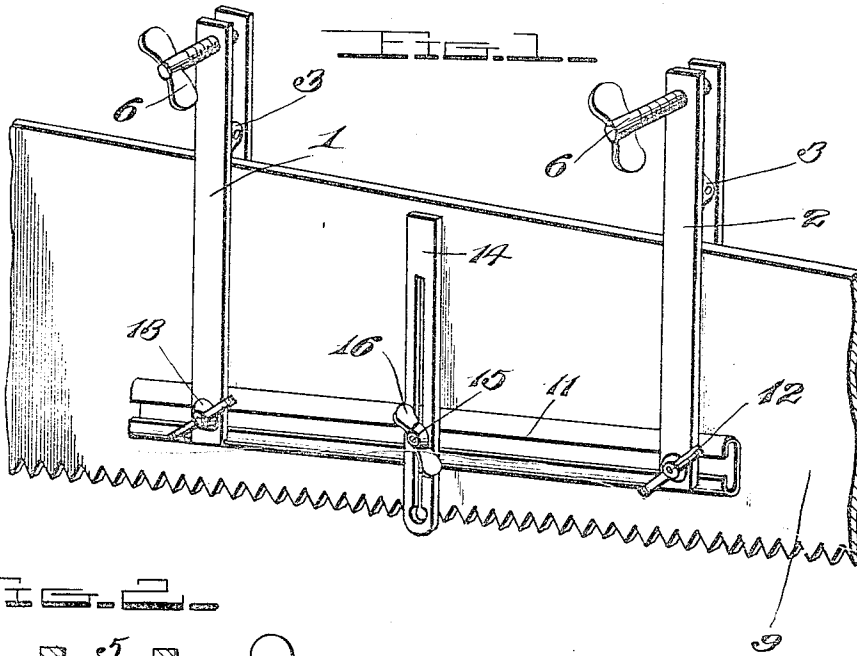


Fig. 2.

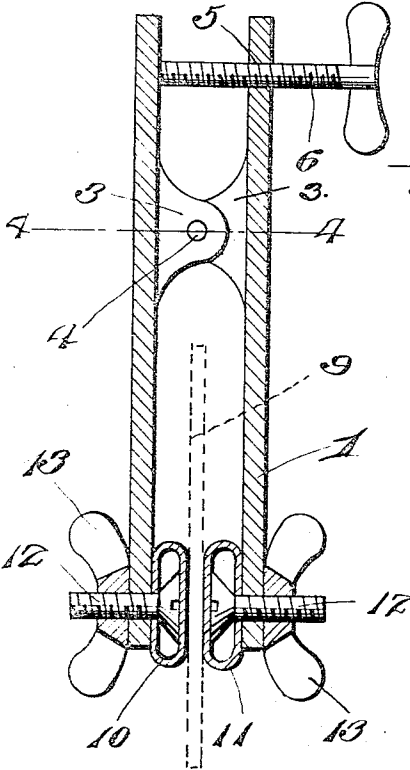
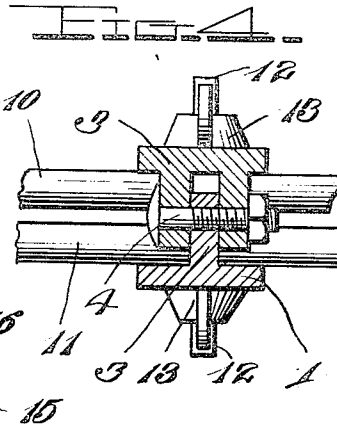
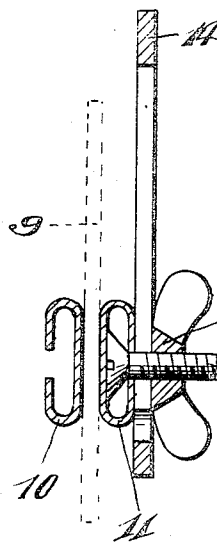


Fig. 3.



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UNITED STATES PATENT OFFICE.

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SAW GAGE AND FILING CLAMP.

1,057,806.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE W. CURBY, a citizen of the United States, residing at Bonham, in the county of Fannin and State of Texas, have invented certain new and useful Improvements in Saw Gages and Filing Clamps, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to new and useful improvements in the art of measuring instruments and more particularly to a combined saw gage and clamp, and my object is to provide a device of this character which may be readily applied to a saw blade to gage the depth of the cut and which may be reversed and used as a clamp for the saw blade in setting the teeth.

A further object of the invention resides in providing a frame formed in sections hinged one to the other, each of which sections is provided with a clamping strip adjustably mounted on said sections, and a still further object resides in providing a gage rule adjustably carried on one of the clamping strips.

Still another object of the invention resides in providing a device which is extremely simple in construction, inexpensive to manufacture, and one which is very efficient and useful in operation.

With these and other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawing forming a part of this application, Figure 1 is a perspective view showing my device applied to use thereon. Fig. 2 is a vertical section through the device showing the attachment of the arms of the sections of the clamping strips thereon. Fig. 3 is an additional vertical section therethrough showing the attachment of the gage rule to the one strip, and Fig. 4 is a horizontal section as seen on line 4—4, Fig. 2.

In describing my invention, I shall refer to the drawings in which similar reference

characters designate corresponding parts throughout the several views and in which—

1 and 2 indicate pairs of arms or the like, the arms of each pair being provided on their inner opposed faces adjacent one end thereof with the ears 3 through which extend the pivot pins 4 thereby forming pairs of pivoted arms. One arm of each pair is provided immediately adjacent the one end thereof with a threaded opening 5 through which extends a thumb screw 6, the free end of which is adapted to contact with the inner face of the opposed pivoted arm, whereby it will be seen that the opposite ends of the pairs of arms may be forced toward one another to have a clamping action by turning the thumb screw in one direction into engagement with the one pivoted arm of each pair. These pairs of arms form a substantial frame adapted for application to a saw blade 9, and in order to clamp said frame to the blade, a pair of metallic strips 10 and 11 is provided, said strips having their side edges bent inwardly toward one another to provide substantial channel-shaped members in cross section. These strips 10 and 11 are adapted to be secured to the arms of this substantial frame member, and in order to provide for this securing, bolts 12 are loosely disposed through the one end of each of the arms of said pairs of arms, said bolts being extended through the end thereof opposite that co-operating with the bolts 6 and the heads of these bolts are disposed, respectively, in the channels formed by the opening in the side edges of the strips 10 and 11. The free ends of the screws or bolts 12 which project beyond the outer faces of the arms of said pairs, have engaged therewith, the thumb nuts 13, whereby the same may be tightened against the outer faces of said arms to secure the strips thereto. In this manner, each strip will be secured to an arm of each pair, the flat faces of said strips being disposed opposed to one another, to form a clamping member to engage opposite sides of the blade 9. A slotted gage rule 14 is also provided, through the slot of which extends the shank of a screw or bolt 15, the

head of said bolt or screw being disposed in the channel of one of said strips, and a thumb nut 16 engaged with the threads of the shank of said screw, is adapted to be turned thereon until engaged with the one face of said gage rule to secure the same in any adjusted position. From this construction, it will be seen that the gage rule may be moved toward either end of the strip to which it is secured and adjusted vertically thereof to any degree desired.

In practice when it is desired to use this device as a saw gage to gage the depth of the cut desired, the thumb screws 6 are first turned so as to permit the pairs of arms 1 and 2 to be separated at their lower ends and applied over the back or rear edge of the saw blade. Said thumb screws are then turned in an opposite direction to force the lower ends of the arms of each pair toward one another thereby clamping the strips 10 and 11 lightly against the opposite faces of the blade 9, it being understood that said strips have already been properly secured to the ends of the arms 1 and 2. The gage rule is then placed in use by the operator by first positioning said rule toward one end of the strip 11 to which it is secured and measurement taken for the desired distance between the saw teeth and the lower edge of said strip. When the proper adjustment has been made at this end, the thumb screw in connection with the adjacent pair of arms is turned to tightly clamp the strips against the blade at this end and the gage rule is then moved to the opposite end of the device and a similar adjustment made whereupon the opposite thumb screw is turned to tightly clamp the strips at this latter end of the blade. The operator may then proceed with the sawing and when the depth to which the gage has been set, is reached, the lower effective edges of the strips 10 and 11 will contact with the work being operated upon and thereby notify the operator that the required depth of cut has been reached. The device may then be removed through merely turning the thumb screw in an opposite direction to that in which it was turned previously, thereby permitting the clamping ends of the device to be disengaged from the side faces of the saw blade and the complete device removed therefrom.

From the foregoing description of the operation of the device, it will be seen that the same is not only used in connection with a saw as a gage for the depth of cut to be obtained, but my device is also adapted for use as a clamp for the blade, whereby the teeth may be operated upon when desired. The application of the device to the blade in this use is identical to that described above, but

the blade is merely reversed so as to position the teeth thereof and the clamping members upwardly. The device may be then placed in a vise or other desired holding means and it will be seen that these clamping strips 10 and 11 will retain the blade rigid while the teeth are being operated upon.

From the foregoing it will be seen that I have provided a simple, inexpensive and efficient combined saw gage and clamp which consists of few and simple parts and which, when set up for operation will be very durable in construction and efficient and useful in operation. Furthermore it will be seen that by constructing the clamping strips in the manner shown, that is, channel-shaped in cross section, the adjustability of the portions of the device may be readily obtained and it will further be seen that by making all the parts adjustable, as described and shown, the device may be readily and quickly applied to use or removed and the parts separated so that the same may be carried about the person, if desired, with little or no inconvenience.

While I have particularly described the elements most well adapted to perform the functions set forth, it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the novel features of the invention.

Having thus described this invention, what is claimed is:—

1. A device of the class described comprising pairs of arms, the arms of each pair being pivoted one to the other intermediate of their ends, a pair of clamping strips formed channel-shape in cross section, a plurality of bolts having the heads thereof disposed in the channels formed by said strips, and having the shanks thereof disposed through the ends of said arms, means to secure the shanks of said bolts to said arms, and means engaging said arms adjacent their opposite ends to regulate the movement of the arms with respect to one another and correspondingly dispose the clamping strips to their effective positions.

2. A device of the class described comprising pairs of arms, the arms of each pair being pivoted one to the other intermediate of their ends, a pair of clamping strips designed channel-shape in cross section, the channel portions of the same being disposed on the outer opposed faces of said strips, a plurality of bolts having the heads thereof disposed in the channels of said strips and having the shanks of the same extended through the lower ends of the arms, and thumb screws engaging the arms on the op-

posite side of the pivotal points thereof, whereby said arms may be swung on their pivots to dispose said clamping strips in their effective positions.

- 5 3. A device of the class described comprising a frame consisting of pivoted arms, clamping strips carried thereon, means for the operation of said arms, and a gage rule removably and adjustably carried on one of

said clamping strips, said gage rule being 10 capable of vertical and longitudinal adjustment on said clamping strip.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

GEORGE W. CURBY.

Witnesses:

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MATTIE BELLE KNOX.