Dec. 15, 1925. 1,566,225

E. L. MILLS

GAUGE

Filed March 24, 1923

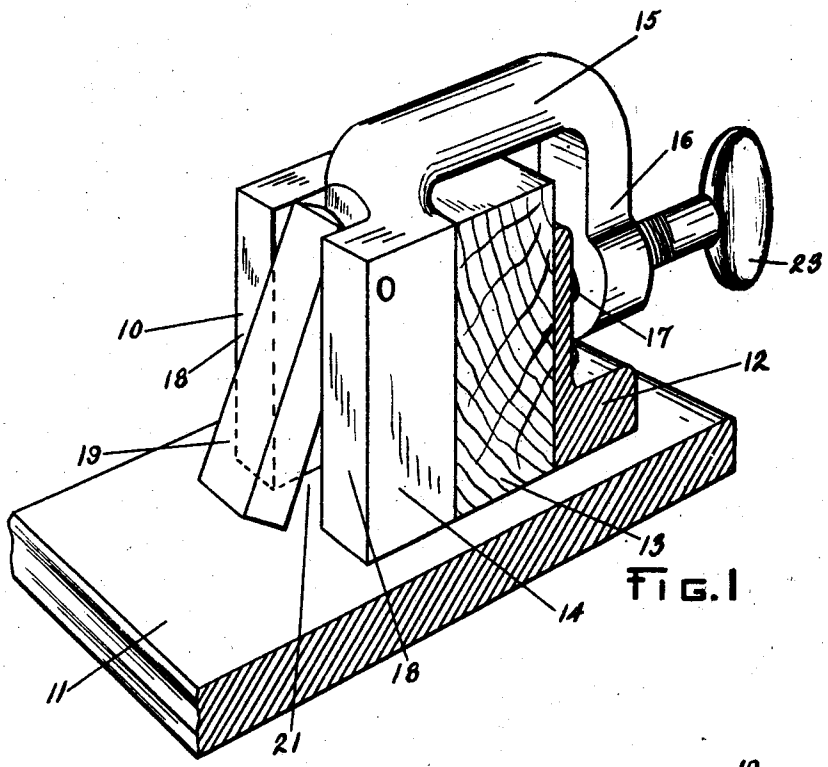


FIG. 1

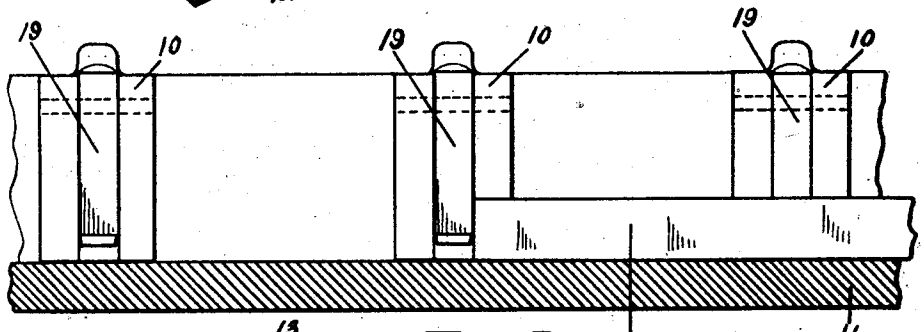


FIG. 2

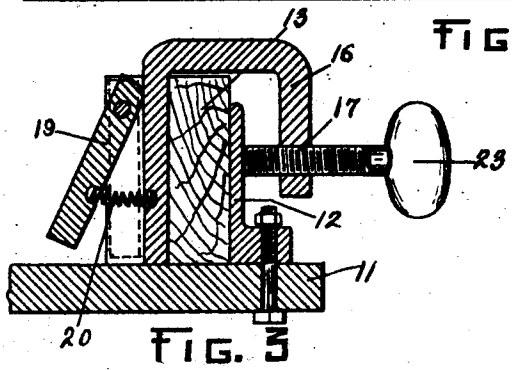


FIG. 3

INVENTOR

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UNITED STATES PATENT OFFICE.

EMMETT L. MILLS, OF JAMESTOWN, NEW YORK.

GAUGE.

Application filed March 24, 1923. Serial No. 627,260.

To all whom it may concern:

Be it known that I, EMMETT L. MILLS, a citizen of the United States, residing at the city of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Gauges, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to an improvement in gauges and more particularly to gauges which have a dog normally held in operative position.

Under many conditions, particularly in wood-working machinery, it is necessary to provide a plurality of stops to hold the work being operated upon at different positions. While a number of stops of this general type have been used, it is found that they require certain positive shifting of the stopping element and are normally in the nonfunctioning position.

A gauge made in accordance with this invention avoids this objection because while the stop element is normally in functioning position it can be quickly and easily depressed and the work allowed to pass without interference. Such a gauge is particularly desirable in connection with woodworking machinery in which work of various lengths may be employed and in which it is desired to determine the maximum length of the strip that can be cut from any particular material and it is further desirable where a plurality of holes at fixed distances apart are to be bored in the work.

The chief object of this invention is to provide a gauge having a stop normally held in operative position by yielding means so that the stop can easily be depressed whereby a plurality of such gauges can be provided at fixed positions along the line of travel of the work to determine accurately the positions which the work is to assume under certain conditions.

Other objects reside in the details of construction disclosed in the following specification taken in connection with the drawing which forms a part thereof and in which—

Figure 1 is a perspective view of one embodiment of this device.

Fig. 2 is a side elevation of a supporting table provided with a plurality of gauges; and

Fig. 3 is a transverse cross section of one embodiment of this invention.

Referring to the drawings, and particularly to Figure 1, the gauge 10, which is selected as embodying one form of this invention, is shown mounted upon a support 11 which may form a part of any suitable machine. Such a support is usually provided with a fixed guide 12 in front of which is mounted a block 13 which is not rigidly secured to the guide 12. The body portion of the gauge 10, as shown, is secured to the guide 12 and also functions to hold the block 13 in position.

The gauge 10 has a main portion 14 which normally rests upon the support 11. Rearwardly projecting from the portion 14 is an arm 15, the inner end 16 of which is bent downwardly and provided with a threaded opening 17. In this opening 17 is mounted the wing-bolt 23. The parts of the gauge are so proportioned that when mounted upon the machine, as shown for example in Figs. 1 and 3, the bolt 23 when tightened bears against the rear face of the guide 12 and thus clamps the block 13 in position.

Between the uprights 18 of the main portion 14 is provided a dog or stop 19 which, under the influence of the spring 20, is normally in the functioning position. Obviously, however, this dog 19 can be depressed against the action of the spring 20 into the pocket 21 between the uprights so that the work which rests against the outer faces of the uprights 18 will pass the gauge without interference.

Referring to Figure 2 it will be noted that a plurality of such gauges 10 may be provided along the path of the work at certain fixed positions the work being here illustrated in the form of a beam 22 normally resting against the face of the uprights 18. As the work is fed through the machine the leading end of the beam will strike against the dog 19 of the first gauge when, if desired, certain operations may be performed. The dog 19 of the first gauge may now be depressed and the work fed forward until it meets the dog 19 of the second gauge, where further operations may be performed. The spring 20, shown particularly in Fig. 3, is under slight tension so that the depressed dog 19 of the first gauge offers no resistance to the movement of the work through the machine.

It will be noted that the end of the dog 19 is above the face of the support 11 so that its action will not be impaired by any accummulation of dust or dirt, a very important consideration when used with woodworking machinery.

The number and arrangement of the gauges may, of course, be varied as desired and while this invention has been shown as particularly adapted for use with woodworking machinery it is obvious that it is not limited thereto but may be employed in any position where gauges are desired.

While one embodiment only is shown and described, I am not to be limited thereto since it is obvious that others may be made without departing from the spirit and scope of the invention as set forth in the following claim.

Having thus set forth my invention what I claim as new and for which I desire protection by Letters Patent is:

A gauge adapted to be mounted adjustably on a support having a fixed guide and a block in front of said guide, said gauge comprising a main portion which rests on said support in front of said block, an arm which extends over said block and guide, a wingbolt in said arm whereby said block and guide are clamped between said wingbolt and the main portion of the gauge, said main portion having a pair of vertical uprights, a dog pivotally supported by and in the space between said uprights, and a spring normally acting to force the free end of said dog out of the space between said uprights.

In testimony whereof I have affixed my signature.

EMMETT L. MILLS.