July 23, 1957 I. BIVANS 2,799,939

PAPER STACK GAUGE

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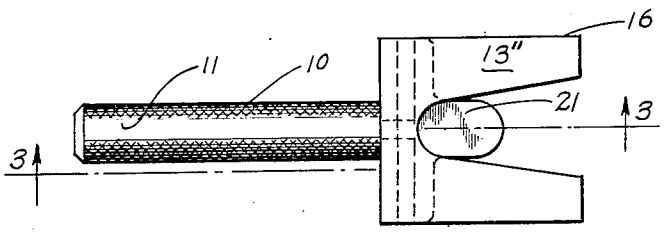


Fig. 1

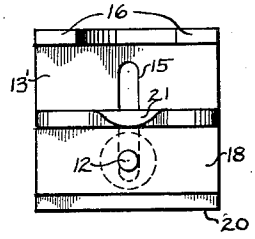


Fig. 2

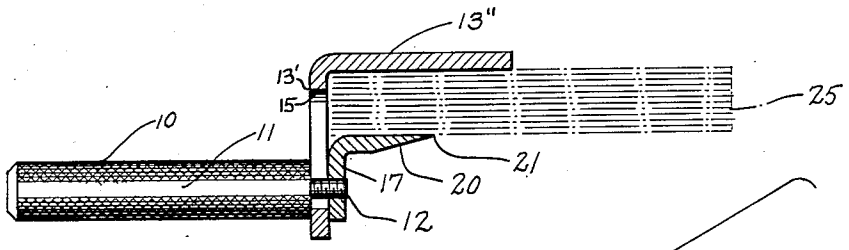


Fig. 3

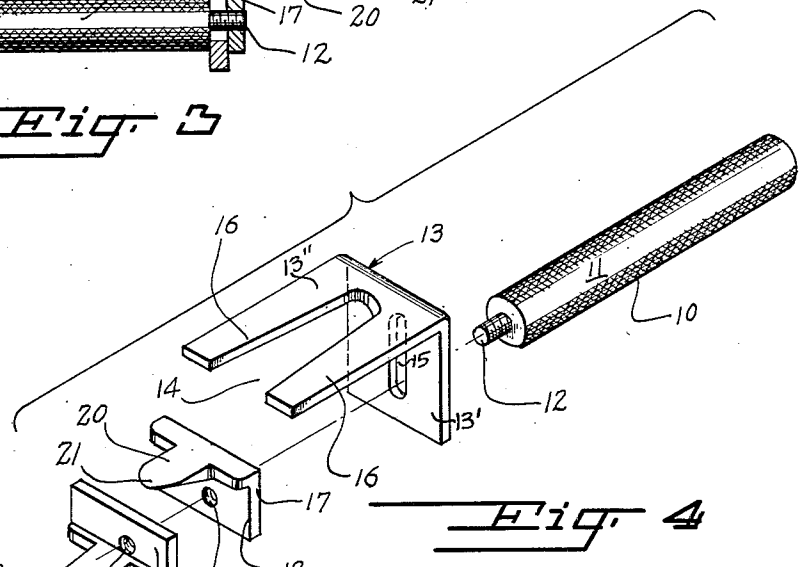


Fig. 4

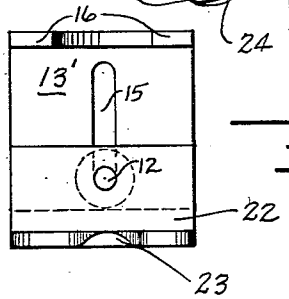


Fig. 5

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PAPER STACK GAUGE

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1 Claim. (Cl. 33—143)

The present invention relates to gauges generally and specifically to a gauge which may be set to a known thickness or number of pieces of paper, pamphlets or the like and with the number known, a repeated number of the same article may be obtained from a stack.

The principal object of the present invention is to provide a simple and inexpensively constructed gauge for repeatedly obtaining a set number of sheet articles from a stack supply.

Another object of the present invention is to provide a singularly useful and economically manufactured hand tool which will measure out a desired number of sheets from a stack supply when a sample number has been hand counted and the tool set for the sample thickness.

A further object of the present invention is to provide a relatively light weight tool of neat appearance and one in which the handle is the adjusting screw, so that no tools or other articles are needed in its use.

These and other objects and advantages of the present invention will be readily apparent from the following description when considered along with the annexed drawings, in which:

Figure 1 is a top view of the present invention,

Figure 2 is an end view of the invention,

Figure 3 is a side view partially in cross section on line 3—3 of Figure 1, showing it in use to separate a quantity of paper articles in a stack,

Figure 4 is an exploded view of the invention showing its three parts and one replacement part, and

Figure 5 is an end view similar to Figure 2, showing the use of the replacement part.

Referring in greater detail to the drawing, in which like numerals indicate like parts throughout the several views, it will be seen that three pieces comprise the invention, the first being a handle **10**, preferably round and cylindrical, with a knurled surface **11** for better gripping. One end of the handle **10** is reduced in diameter and threaded to form a bolt **12**.

The second part is a main frame **13** having a flat vertically disposed leg **13'** and another flat leg **13''** projecting horizontally from the upper end of the leg **13'**. The leg **13''** has a slot **14** extending inwardly from its free end and forms a pair of spaced flat fingers **16**. The leg **13'** is provided with a closed slot **15**.

The third part comprises an L-shaped gauge member **17** which is positioned so that its longer leg **18** abuts the vertical leg **13'** of the frame **13** with its shorter leg **20** parallel to the horizontal leg **13''** of the frame **13**, the longer leg **18** being provided with a tapped hole **19**. A knife edge finger **21** projects from the shorter leg **20** of the gauge member **17** and is positioned between the pair of fingers **16** of the main frame **13**. This part of the invention has a replacement piece indicated generally in Figure 4 at **22** and in which the outer face is rounded and the inner face is flat to form a similar finger **23**. The replacement piece **22** is to be used when a larger number of sheets is to be measured, as will be seen in Figure 5 when compared to that of Figure 2, and of course a tapped hole **24** is provided to receive the bolt **12**.

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The use of the device is believed to be obvious. The knife edged finger **21** or **23** is inserted into a stack supply of sheets **25** with the long fingers **16** on top of the stack and with the flat outer face of the finger **21** or the flat inner face of the finger **23** parallel with the fingers **16**. After a number of sheets has been counted, the handle **10** is untwisted enough to free the member **17** or its replacement piece **22** and the main frame **13** is moved one way or the other to adjust the relative positions of the fingers **16** with the fingers **21** or **23**.

Each of the fingers **21** and **23** are rounded at their ends and honed to a knife edge, and the inner sides of the fingers **16** and flat faces of the fingers **21** and **23** ground or polished so that they are parallel and smoothly inserted into a ream or other stack of paper as desired.

While only preferred embodiments have been here illustrated and described, other embodiments are believed possible within the scope of the appended claim without departing from the spirit of the invention.

What is claimed is:

A paper stack gauge comprising a main frame having a flat vertically disposed leg and another flat leg projecting horizontally from the upper end of said vertical leg, said horizontal leg having a slot extending inwardly from its free end and forming a pair of spaced fingers, an L-shaped gauge member positioned so that its longer leg abuts said vertical leg with its shorter leg parallel to said horizontal leg, a knife edge finger projecting from said shorter leg and positioned between said pair of fingers, and means releasably securing said longer leg to said vertical leg, said means embodying a handle having on one end a threaded bolt extending through said vertical leg and threadedly engaging said longer leg, the knife edge finger being adapted to be slid between adjacent sheets in a stack of sheets with a known quantity of sheets when said pair of fingers and said knife edge finger receive the sheets of said stack therebetween.

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