W. H. GELBAUGH.

GAGE.

APPLICATION FILED NOV. 8, 1911.

1,031,995.

Patented July 9, 1912

2 SHEETS—SHEET 1.

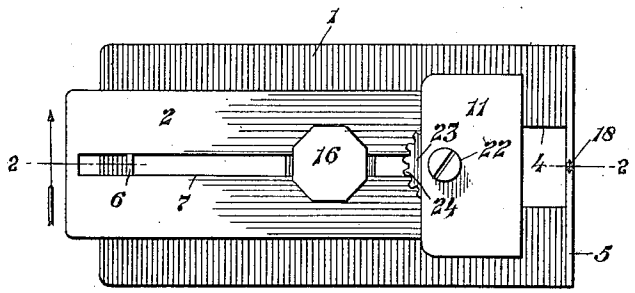

Fig. 1.

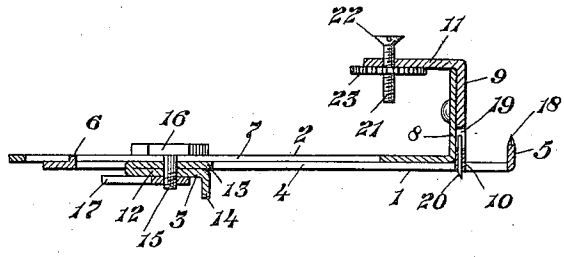

Fig. 2.

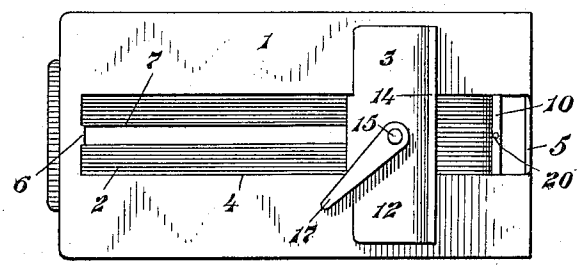

Fig. 3.

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2 SHEETS—SHEET 2.

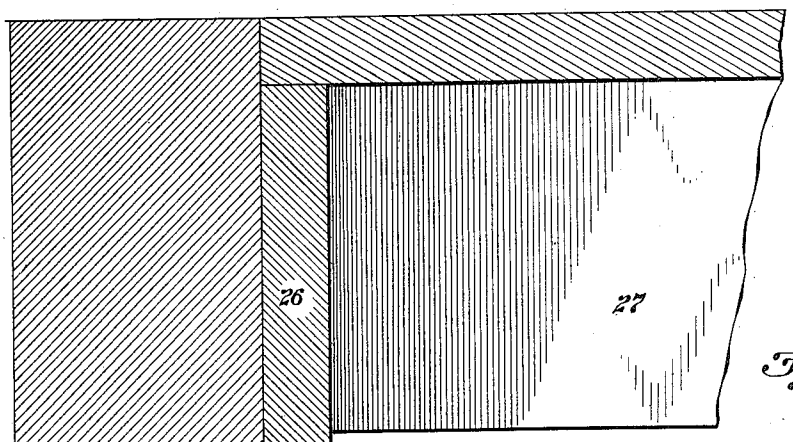


Fig. 4.

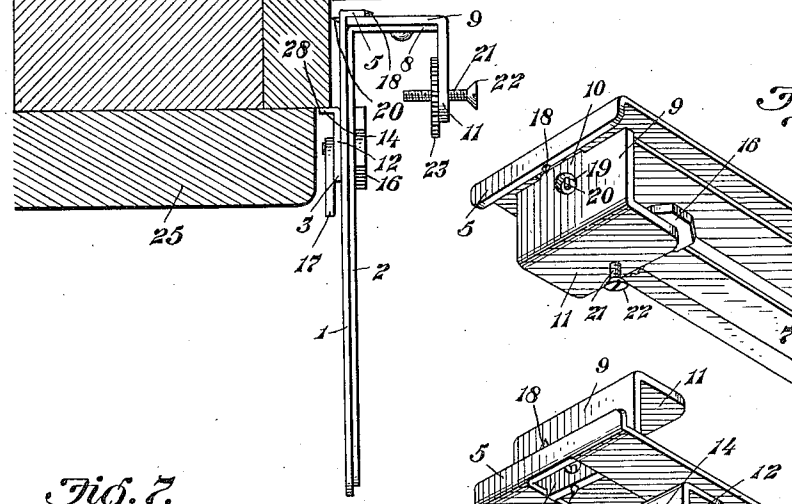


Fig. 7.

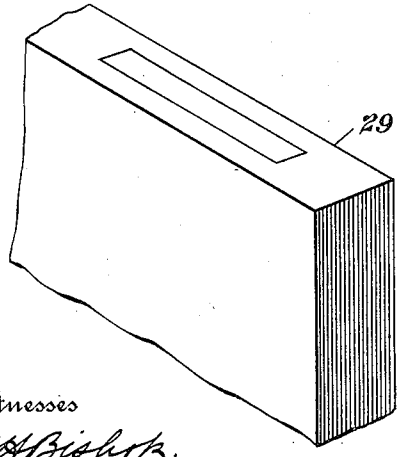
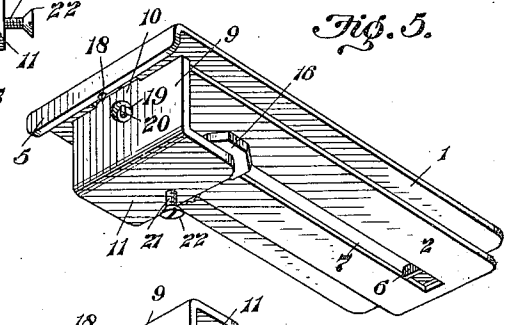


Fig. 5.



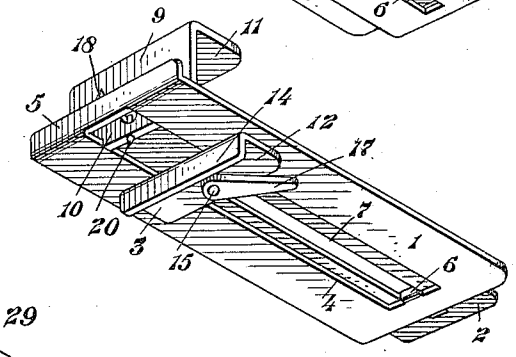


Fig. 6.

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UNITED STATES PATENT OFFICE.

WILLIAM H. GELBAUGH, OF DENVER, COLORADO.

GAGE.

1,031,995. Specification of Letters Patent. Patented July 9, 1912.

Application filed November 8, 1911. Serial No. 659,086.

To all whom it may concern:

Be it known that I, WILLIAM H. GELBAUGH, a citizen of the United States, now residing at Denver, in the county of Denver and State of Colorado, formerly residing at Tacoma, Washington, have invented a new and useful Gage, of which the following is a specification.

This invention relates to improvements in gages particularly adapted for use by carpenters or other mechanics, and especially to improvements in the type of such gage heretofore disclosed in my United States Patent numbered 940,001, issued Nov. 16, 1909.

The objects of my invention are to generally improve gages of the character mentioned and to provide a simple, practical gage adapted for a wide range of uses and capable of many adjustments and operations not possible with gages of analogous construction heretofore in use. These objects, together with other objects apparent to those skilled in the art, may be attained by the construction illustrated in the accompanying drawings, although the invention may be embodied in other forms, the construction illustrated being chosen by way of example.

In the drawings, Figure 1 is a top view of a gage embodying my invention. Fig. 2 is a longitudinal sectional view of the same on the line 2—2, of Fig. 1. Fig. 3 is a bottom view of the gage. Fig. 4 is an edge view of the gage in position for operation on the jamb of a cupboard door. Fig. 5 is a perspective view of one side of the device in adjustment as a mortise gage. Fig. 6 is a perspective view of the other side of the gage in the same adjustment. Fig. 7 is a fragmentary perspective view showing the character of work for which the gage as shown in Figs. 5 and 6 is adjusted.

Throughout the several views similar reference numerals indicate similar parts.

Generally speaking the gage comprises three mutually longitudinally adjustable members, a first member 1, a second member 2 and a third member 3, each of said members being provided with a fiducial portion. The member 1 comprises a plate provided with a median, longitudinally disposed slot 4 with parallel sides, which slot extends from the relatively narrow, up-turned fiducial flange 5 substantially to the rear end of the member. At the rear end of the slot 4 an integral up-turned guiding lug 6 is provided. The flange 5 is formed integrally with the plate 1 and is arranged at right angles to the sides of the slot 4.

The member 2, arranged upon the member 1, also comprises a plate, preferably of the same length and of less width than said member 1. A median, longitudinally arranged slot 7 in the member 2 is formed with parallel sides and of a width less than the width of the slot 4. The slot 7 extends for the greater part of the length of the plate 2 and slidably receives the lug 6 heretofore mentioned. At the forward end of the member 2 the integral portion 8 is bent upwardly at right angles to the plane of said member and at right angles to the sides of the slot 7. Fixedly attached to the portion 8 is the relatively broad fiducial portion 9 of an angle plate, an integral lug portion 10 of which extends downwardly through the slot 4, the lower edge of said lug portion lying in the plane of the bottom surface of the member 1. The auxiliary fiducial portion 11 of said angle plate is bent backwardly at right angles to the portion 9, thus being disposed parallel with the main body of the member 2.

The member 3 comprises a relatively small body portion 12 formed of a plate extending substantially as wide transversely of the gage as the member 1, but of comparatively short dimension longitudinally. The body portion 12 is provided with an integral, folded guiding tongue 13, of a width to slidably engage the edges of the slot 4, in which slot said tongue is arranged, and with a relatively narrow, integral, downwardly extending fiducial flange 14 extending at right angles to the plane of the member 1 and at right angles to the edges of the slot 4.

The clamping screw 15 is provided with a head 16 adapted to engage the top surface of the member 2 adjacent the slot 7, said screw 15 extending through the slot 7 and through the tongue 13 and body portion 12 of the member 3, on the underside of which member a thumb-lever nut 17 is provided, by the turning of which the first, second and third members may be clamped together or loosened for adjustment as may be desired.

It will be understood from the foregoing that the fiducial flange 5, fiducial portion 9

and fiducial flange 14 are at all times accurately parallel with each other, and that the first, second and third members generally comprising the gage are mutually adjustable by true, longitudinal, relative movement.

In the median line of the gage the flange 5 is provided with an integral scratch point 18 extending up in line with said flange. For the purpose of providing a downwardly extended scratch point, a pin receiving aperture is drilled upwardly into the lug portion 10 in the median line of the gage and into an adjusting aperture 19 opening from the front side of the portion 9. Arranged within said pin receiving aperture is an adjustable scratch pin 20 provided with a point at its lower end and frictionally engaging the walls of said aperture so as to be capable of adjustment therein. As the point of said scratch pin wears by use a suitable instrument may be entered into the adjusting aperture 19 and into engagement with the upper end of the pin 20 to drive the same downwardly, thus extending the point. When justified by wear the remainder of the original pin 20 may be removed and a new pin substituted, as will be readily understood by those skilled in the art.

In a vertically disposed, threaded, aperture in the auxiliary fiducial portion 11 is adjustably arranged a screw 21 provided with a head having a scratch-edge 22. On the underside of the portion 11 a jam-nut 23 is arranged upon the screw 21, whereby said screw may be held in any desired fixed adjustment with reference to the portion 11. The periphery of the jam-nut 23 is preferably provided with the projections or teeth 24 for convenience in the manual operation of said jam-nut.

In my United States Patent No. 940,001 hereinbefore mentioned I disclosed a gage of a construction analogous to the present invention and I now refer to said patent as showing some of the particular uses to which the gage herein described may be put. In fact this later construction is capable of all the uses and functions of the gage disclosed in said former patent, but in addition is capable of performing many operations entirely impossible with the old construction. As an instance of one of the novel functions of the present invention, attention is directed to Fig. 4 where the numeral 25 designates the casing, the numeral 26 the jamb and the numeral 27 the shelf of a cupboard such as is commonly called a medicine cupboard frequently built in the walls of modern bath rooms and the like. The gage illustrated in Fig. 4 is shown in position for describing on the jamb the recess for a hinge of the cupboard door. It will be noted that the working edge for the gage is the front edge of the jamb 26, at 28, and that the hinge recess extends into close proximity to the front edge of the shelf 27. In such instance the fiducial flange 14 is the one which should be used on the edge 28 and by reason of the mutual adjustment of the gage members, the member 2 can be moved forwardly to bring the scratch pin 20 into its most forward position with relation to the member 1, whereupon the member 3 may be brought forward with relation to both first and second members until the proper distance between the pin 20 and the flange 14 is attained. The thumb-lever nut may then be thrown to clamp the members together and the gage applied and used in describing the hinge recess as shown in Fig. 4, there being no forward projection with which the shelf 27 may interfere.

As another instance of the novel use to which my invented gage may be put I have illustrated in Fig. 7 a portion of a door or other object with a mortise properly described on the edge of the same. In said figure the numeral 29 indicates the working edge for the gage and Figs. 5 and 6 illustrate the gage in the appropriate adjustment for describing the mortise. In adjusting the gage for the work the first and second members are moved with relation to each other to bring the fiducial portion 9 into position with relation to the point 18 to describe the side of the mortise nearest the edge 29. The third member is then adjusted to bring its fiducial flange 14 into appropriate relation to the pin 20 to describe the side of the mortise farther from the edge 29. The nut 17 is then thrown to clamp the members together whereupon by turning the gage as shown in Fig. 5, one side of the mortise can be described and by turning the gage over as shown in Fig. 6, the other side of the mortise can be described. When using the point 18, the fiducial portion 9 should be held against the edge 29 while in using the pin 20 the fiducial flange 14 should be held against said edge.

While the two instances just given will illustrate the novel uses to which the present invention can be applied, such instances could be greatly multiplied, as the three members being mutually adjustable largely increases the possibilities and usefulness of the device.

The simple adjustment of the pin 20 will be appreciated by practical workmen as any mechanic of ordinary skill can replace the pin when it is worn and can adjust the point at will. The point 18, being usually used less than the pin 20, is not subject to so much wear, but if said point should become dull the adjoining portions of the fiducial flange 5 may be filed down, leaving the point more extended, the flange 5 being purposely made of sufficient width to permit of such repair.

The jam-nut 23, as compared with the

construction disclosed in my previous patent hereinbefore mentioned, greatly increases the usefulness and convenience of the gage.

I claim—

1. A gage comprising a longitudinally slotted first member having an integral, up-turned fiducial flange at its forward end and a scratch point arranged on said flange and extending in the same direction as said flange, a second member arranged upon the upper-side of said first member and longitudinally slidable thereon, said second member provided at its forward end with an upwardly extending fiducial portion and with a scratch point extending downwardly through the slot in said first member, and a third member arranged on the under-side of said first member and longitudinally slidable with relation to both first and second members, said third member provided with a downwardly extending fiducial flange, and means for clamping the three members in fixed relative adjustment.

2. A gage comprising a longitudinally slotted first member having an up-turned fiducial flange at its forward end provided with a scratch point, a second member arranged upon the top side of said first member and longitudinally slidable thereon, said second member provided at its forward end with an upwardly extending fiducial portion, said fiducial portion provided with a downwardly-opening pin aperture and a frontwardly-opening adjusting aperture intersecting said pin aperture, a scratch pin arranged in said pin aperture and frictionally engaging the walls of the same, said scratch pin extending downwardly through the slot in said first member and a third member arranged on the under-side of said first member and longitudinally slidable with relation to both first and second members, said third member provided with a downwardly extending fiducial flange, and means for clamping the three members in fixed relative adjustment.

3. A gage comprising a first member formed of a longitudinally slotted plate having at its rear end an integral, up-turned guiding lug and at its forward end an integral, up-turned, transversely disposed, fiducial flange and a scratch point on said fiducial flange; a second member formed of a longitudinally slotted plate arranged on the top of said first member, the guiding lug of said first member being slidably arranged in the slot of the second member, said second member provided with an up-turned, transversely disposed, fiducial portion at its forward end, said fiducial portion provided with an adjustable scratch point extending downwardly through the slot in said first member; a third member arranged on the under-side of said first member and provided with a down-turned, transversely disposed, fiducial flange, said first, second and third members being mutually, longitudinally adjustable; and means extending through the slots of said first and second members and into engagement with said third member for holding said members in fixed adjustment.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM H. GELBAUGH.

Witnesses:
JOHN H. BISHOP,
WILLIAM H. MILLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."