

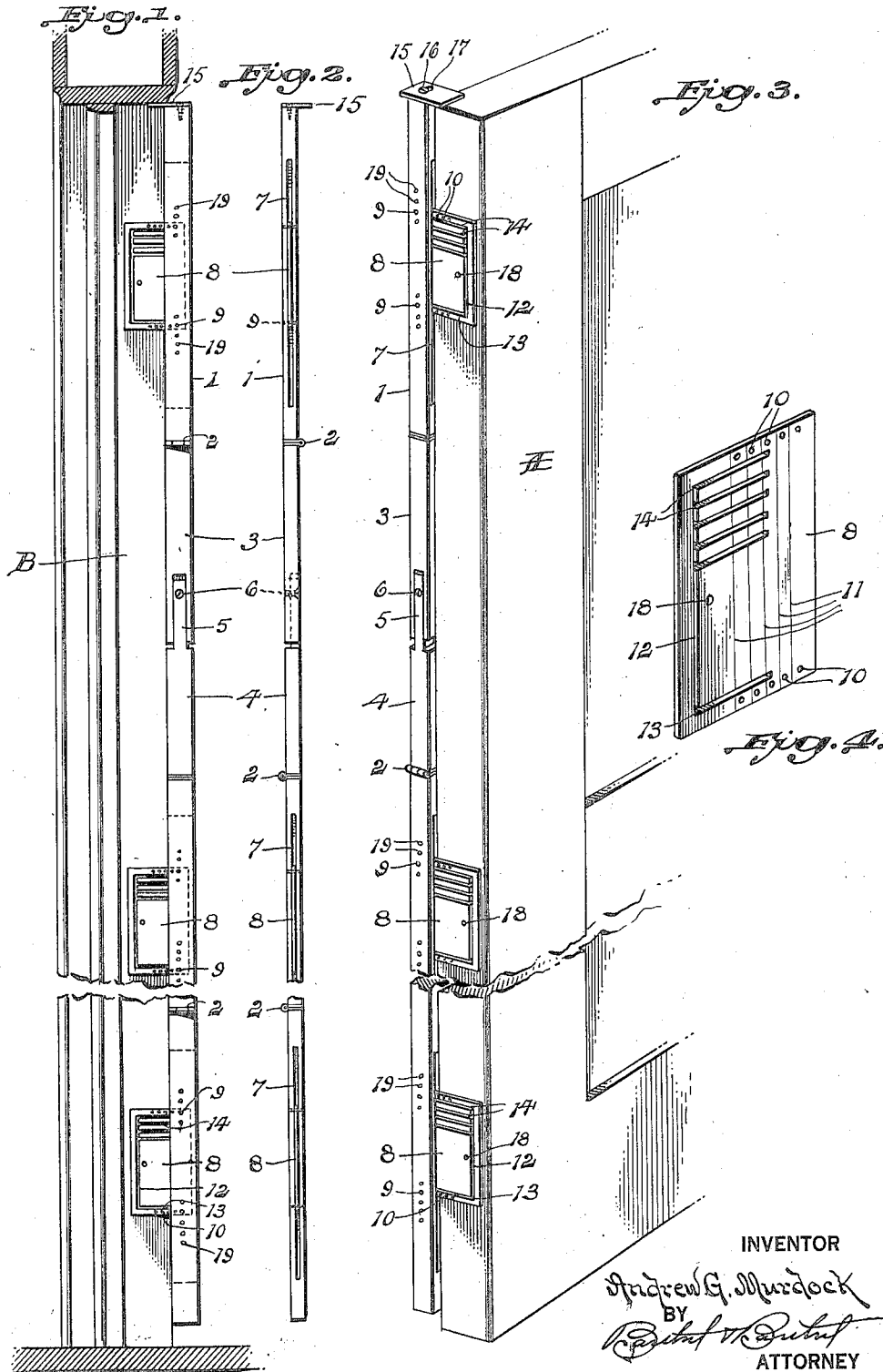
A. G. MURDOCK.

HINGE GAGE.

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INVENTOR

Andrew G. Murdock
BY
Robert V. Dubut
ATTORNEY

UNITED STATES PATENT OFFICE.

ANDREW G. MURDOCK, OF HIGHLAND PARK, MICHIGAN.

HINGE-GAGE.

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To all whom it may concern:

Be it known that I, ANDREW G. MURDOCK, a citizen of the United States of America, residing at Highland Park, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Hinge-Gages, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to devices for locating hinges upon doors, door casings and the like, and its object is to provide simple means which may be folded into a small space to facilitate its being carried about and which is so constructed as to facilitate the accurate location of the leaves of a hinge upon a door or other member by providing means for accurately alining the hinge upon such member.

20 A further object is to so make such a device that it is particularly adaptable for locating the leaves of a hinge upon a door and may then be applied to the door casing to accurately locate the corresponding leaves of the hinge upon said casing.

25 A further object is to provide a device which is universally adjustable for hinges of different sizes and also for locating hinges upon doors or other closures of different lengths and to which two or more hinges are to be applied. It is also an object of the invention to provide a very light, simple and compact construction adapted to be carried as part of the equipment or tools of a carpenter and which is in the nature of a gage or folding rule which may be folded into a small space and carried in a tool box.

30 It is also an object of the invention to provide certain other new and useful features in the construction and arrangement of parts.

35 With the above and other ends in view the invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims, reference being had to the accompanying drawing in which—

40 Figure 1 is a side elevation of a device embodying the invention and showing the same as applied to a door casing for use in locating hinges; thereon;

45 Fig. 2 is an edge elevation of the device;

Fig. 3 is a perspective view of the device as applied in use to the edge of a door for locating hinges thereon, and

Fig. 4 is a perspective detail of a scribe 55 plate.

As illustrating the use of the device embodying the invention, the same is shown in the drawing as applied to the edge of a door A for locating hinges thereon and also 60 as applied to a door casing B for locating the other leaves of hinges in proper relation to the hinge leaves on the door. It will be understood, however, that the device may be used for locating hinges accurately upon 65 any hinged closure and upon the casing or other member to which the closure is to be attached by hinges.

The gage or device consists of any desired number of sections or parts 1 which are 70 preferably formed of wood of desired size in cross section and which parts are preferably of rectangular shape in cross section. These several parts or sections are connected by hinges 2 at their adjacent ends, said 75 hinges being arranged in alternate relation so that the several sections will fold one upon another to form a compact bundle of a length equal to one of the sections so that the gage may be conveniently carried 80 in a tool box.

Certain of the intermediate sections are preferably made in two parts 3 and 4, the adjacent ends of which are slidably connected in any suitable manner so that they 85 may be adjusted relatively in a longitudinal direction to lengthen the overall length of the gage and to so adjustably connect these parts the part 3 may be provided with a dove-tail groove extending inward from its 90 end and the part 4 provided with a dove-tail tongue 5 to engage and slide within the groove. The parts 3 and 4 are held in their adjusted relation by any suitable means such as a set screw 6 passing through 95 the tongue and engaging the adjacent part 3.

The two end sections of the gage and preferably an intermediate section, are preferably formed with a longitudinal slot or saw kerf 7 in one edge of the bar forming the gage 100 section and into this saw kerf is set a suitable scribe plate 8; preferably formed of thin sheet metal. Each of these plates 8 is adjustably held within its saw kerf or slot 7 by means of pins 9 engaging series of transverse openings 19 in the bar and one of a series of openings 10 in the plate adjacent the upper and lower edges of the plate. By 105

removing the pins 9 the plate may be adjusted longitudinally of the bar and in or out of the slot so that the plate will project a greater or lesser distance from the slot and to facilitate the accurate adjustment of the plate, guide lines 11 are preferably provided upon the face or faces of the plate to indicate the exact distance at which a vertical slot 12 formed in the plate parallel with its outer or free edge will be from the adjacent edge of the bar when the plate is adjusted in its slot to bring one of these lines into coincidence with the edge of the bar. The plate 8 is also formed with a slot 13 parallel with one end edge of the plate and opening into and extending at right angles to the slot 12. Adjacent the other end of the plate a series of parallel slots 14 is formed extending at right angles to and opening into the slot 12. The distances between the slot 13 and the several slots 14 represent or correspond to the several lengths of the hinge leaves commonly used and the widths of which leaves correspond to the several distances between the slot 12 and the several lines 11.

When the gage is applied to a member upon which it is desired to locate a hinge leaf with the plate adjusted to a line 11 corresponding with the width of the hinge leaf which is to be attached, the carpenter may, by the use of a suitable tool or pencil scribe a line on the door or other closure accurately corresponding to the outline of the hinge leaf to be applied thereto by inserting the tool or pencil in the proper slot of the plate and following this slot to outline the hinge leaf. After he has so outlined the hinge leaf to be applied to the closure, the gage may be used without further adjustment to scribe the corresponding hinge leaf upon the door casing or other part to which the closure is to be attached.

Secured upon the upper end of the upper section of the gage or bar, is secured a small rectangular plate 15 by means of a screw 16 passing through a slot 17 extending transversely of the plate. This plate is of greater width and length than the width and length of the end area of the bar to provide an over-hang at one edge of the bar and also at one side of the bar.

By adjusting this plate transversely upon the end of the bar, the plate may be given an over-hang at either side of the bar.

When the gage is applied to a door A for locating hinges thereon, the gage is hung upon the door with one edge of the gage or bar in close contact with the side edge of the door and supported in position by the plate 15 engaging over the upper end of the door. After having adjusted the scribe plates to correspond with the hinge leaves to be applied, and also having adjusted the intermediate bar sections 3 and 4 to lengthen

or shorten the overall length of the gage and also adjusting the scribe plates longitudinally of their slots 7 so that the hinges will be located in their proper relative relation and also in their proper places upon the door, the carpenter may further secure the gage in position to accurately hold it while he is scribing the outline of the hinge leaves, by placing small pins or nails in openings 18 provided therefor in each of the scribe plates, thus detachably tacking these several plates in accurately adjusted position against the edge of the door.

After having scribed the outline of the hinge leaves upon the edge of the door, the gage is applied as shown in Fig. 1 to the door casing, the plate 15 being placed against the upper horizontal member of the casing with the edge of the bar in close contact with the hinge of the vertical side member of the casing and then attaching the several scribe plates to the casing by means of pins in the openings 18, and thus securely holding the gage in place while he proceeds to scribe the outline of the corresponding hinge leaves upon the casing.

The plate 15 is of a thickness to give the proper clearance between the upper edge of the door and the upper end of the door opening when the door is hung, the gage being applied to the casing with the plate in contact with the surface of the horizontal member of the casing, serving to locate the hinge member on the casing just the thickness of the plate farther down upon the casing than said hinge members are located from the upper edges of the door.

A very simple device for the purpose is thus provided which may be readily carried about by a carpenter and which may be quickly and easily adjusted by an unskilled person to properly locate hinges.

Obviously, changes may be made in the construction of the bar and scribe plates and also in the manner in which the several parts are adjustably held, within the scope of the appended claims without departing from the spirit of the invention and I do not therefore limit myself to the construction or arrangement shown.

Having thus fully described my invention, what I claim is:—

1. A hinge gage including a bar formed of a plurality of hinge connected parts adapted to be folded, one upon another, and means attached to certain of said parts for locating the position of hinge leaves upon a member to which the gage is applied, one of said parts being extensible to increase the over-all length of the bar.

2. A hinge gage including a bar to engage an edge of a part to which hinges are to be applied, a plate adjustably secured to said bar and projecting laterally therefrom, said plate being provided with a longitudinal

slot extending parallel with an edge of the bar, and a plurality of slots extending laterally from said slot toward said edge of the bar, said slot forming guides for marking the outline of hinge leaves.

3. In a device of the character described, the combination of a bar comprising a plurality of hinge connected sections adapted to fold one on the other, a plate adjustably secured to the end of one of the end sections, and scribing plates of thin sheet metal adjustably secured to certain of said sections and each formed with a longitudinal slot, and a plurality of slots extending laterally from the longitudinal slot.

4. In a device of the character described, the combination of a bar comprising a plurality of hinge connected sections, arranged

end to end to fold one upon the other, and certain of said sections being formed with longitudinal slots, thin sheet metal plates engaged in said slots and adjustable therein longitudinally of the bar, each of said plates being formed with a slot conforming to the outline of a hinge leaf, a supporting plate having a transverse slot, and means engaging said slot for holding said plate adjustably upon the end of one of the sections of the bar.

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

ANDREW G. MURDOCK.

Witnesses:

LEWIS E. FLANDERS,
ANNA M. DORR.