C. E. ROSE.

DOOR GAGE.

APPLICATION FILED MAY 3, 1911.

1,004,471.

Patented Sept. 26, 1911.

2 SHEETS—SHEET 1.

Fig. 2.

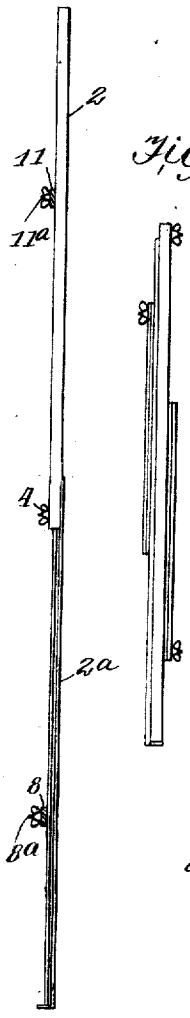


Fig. 1.

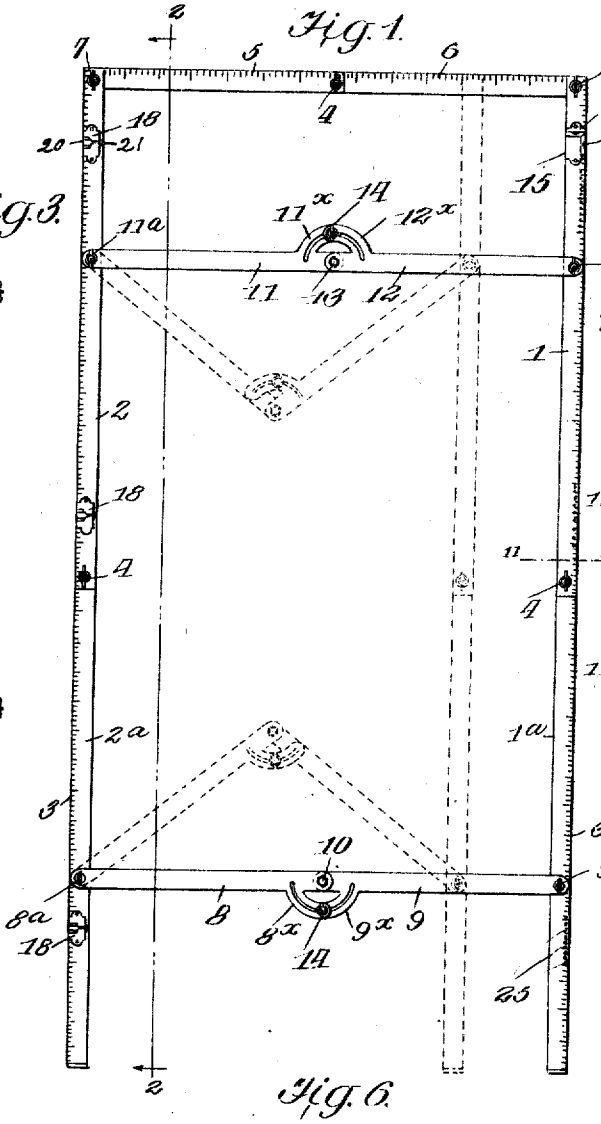


Fig. 3.

Fig. 4.

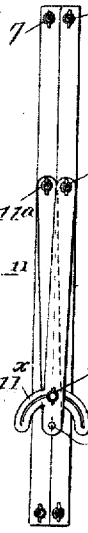


Fig. 5.

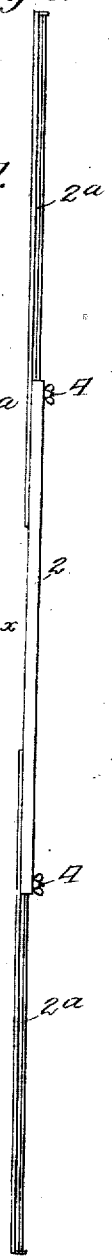
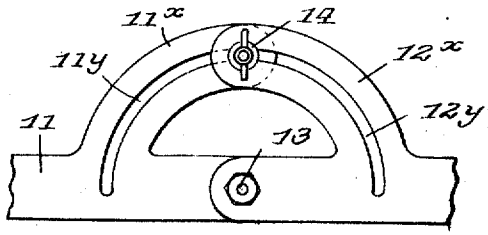


Fig. 6.



WITNESSES

Samuel E. Wade.

R. A. Stanley

INVENTOR

CARL E. ROSE

BY Munn & Co.

ATTORNEYS

C. E. ROSE.

DOOR GAGE.

APPLICATION FILED MAY 3, 1911.

1,004,471. **Patented Sept. 26, 1911.**

2 SHEETS—SHEET 2.

Fig. 7.

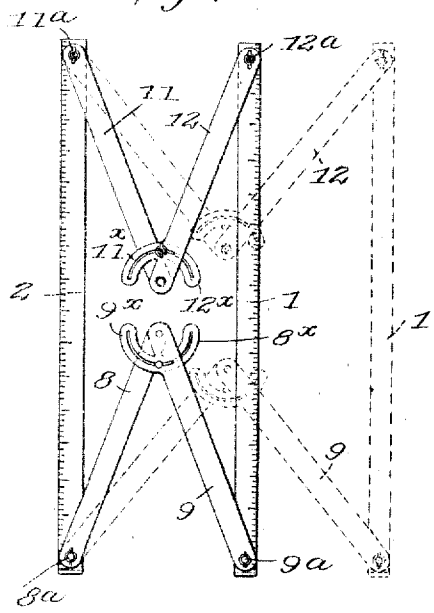


Fig. 8.

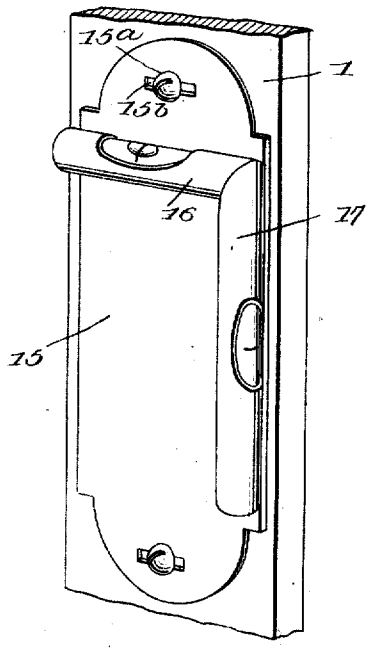


Fig. 9.

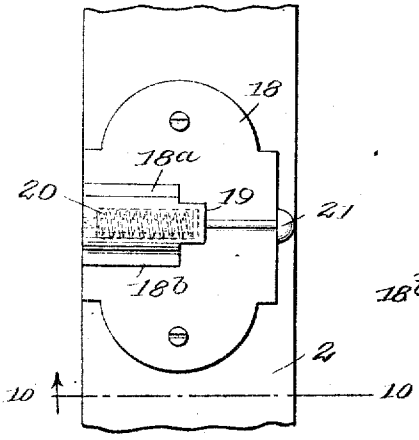


Fig. 10.

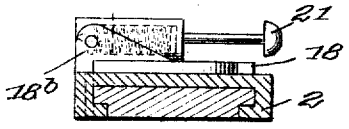
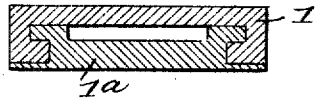


Fig. 11.



WITNESSES

Samuel E. Wade.

L. A. Stanley

INVENTOR

CARL E. ROSE.

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

CARL E. ROSE, OF SAN DIEGO, CALIFORNIA.

DOOR-GAGE.

1,004,471. Specification of Letters Patent. Patented Sept. 26, 1911.

Application filed May 3, 1911. Serial No. 624,780.

To all whom it may concern:

Be it known that I, CARL E. ROSE, a citizen of the United States, and a resident of San Diego, in the county of San Diego and State of California, have made certain new and useful Improvements in Door-Gages, of which the following is a specification.

My invention relates to improvements in means for gaging doors, windows, and the like, and it consists in the constructions, arrangements and combinations herein described and claimed.

An object of my invention is to provide a door gage which may be extended in either direction and which is provided with means for marking the position of the hinges, etc.

A further object of my invention is to provide a door gage having parts which may be used for other purposes than for gaging doors, as for instance a bevel square, straight-edge, plumb and level, grade finder, and slide rule.

A further object of my invention is to provide a scale which may be folded into a small compass when not in use.

A further object of my invention is to provide a scale having a novel form of marking device.

Other objects and advantages will appear in the following specification and the novel features of the invention will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings forming part of this application in which similar reference characters indicate like parts in the several views and in which—

Figure 1 is a side view showing one embodiment of my invention, the level and marking device being applied thereto, Fig. 2 is a section along the line 2—2 of Fig. 1, looking in the direction of the arrows, the level and marking devices being removed, Fig. 3 is a view from the opposite edge showing the device in its closed position, Fig. 4 is a face view of the device in its closed position, the top bar being removed, Fig. 5 is a side view of a modified form showing the use of two slidable portions, Fig. 6 is a detail view showing one of the center joints of the spacing members, Fig. 7 is a view showing the positions of the side members with the top bar removed, Fig. 8 is a perspective view showing the levels attached to the scale, Fig. 9 is a face view of one of the marking devices, Fig. 10 is a section along the line 10—10 of Fig. 9, Fig. 11 is a section along the line 11—11 of Fig. 1.

In carrying out my invention, I provide a pair of side members 1 and 2 respectively of the shape best shown in Fig. 11. In this figure I have shown a section of the member 1, the member 2 being precisely similar in form. These members are arranged to receive the sliding members 1^a and 2^a respectively, these members being of the form shown at 1^a in Fig. 1. All of the members 1, 2, 1^a and 2^a are graduated in any scale, preferably in inches as shown at 3. The set screws 4 are provided to secure the relatively movable parts together at any position desired. At the upper part of the members 1 and 2, I secure a member 5 which is similar in shape to the members 1 and 2, and a telescopic member 6 which is similar to the slidable members 1^a and 2^a. These may be also held in position by means of a set screw 4. Set screws 7 secure the parts 5 and 2 together and 6 and 1 together.

Toward the lower end of the frame and forming a part thereof, are the spacing members 8 and 9 respectively, the former being pivotally secured to the slidable part 2^a at 8^a and the latter being pivotally secured to the slidable member 1^a at 9^a. The members 8 and 9 are pivotally connected at 10. Between the spacing members 8 and 9 and the top members 5 and 6 are the spacing members 11 and 12 which are pivotally connected at 13, the member 11 being pivotally connected to the side member 2 at 11^a and the member 12 being pivotally connected to the side member 1 at 12^a. The member 12 is provided with an arc-shaped arm 12^x having an arc-shaped slot 12^y, while the member 11 has a similar arm 11^x and a similar slot 11^y. The arms 11^x and 12^x may be secured together by means of a thumb screw 14 which passes through the slots 11^y and 12^y. The members 8 and 9 are provided with similar arms 8^x and 9^x.

In Fig. 8, I have shown a plate 15 which may be secured to one of the side members such as 1 and which bears leveling devices 16 and 17.

In Figs. 9 and 10, I have shown a plate 18 which bears a pair of uprights 18^a and 18^b between which is pivotally carried a housing 19 containing a spring 20 which controls a pin 21. This housing 19 may be swung about its pivot as shown in Fig. 10, so as to bring the pin either in a vertical

or horizontal position. The purpose of this device will be explained later.

From the foregoing description of the various parts of the device the operation thereof may be readily understood.

The device shown in Fig. 1 is placed in a door opening. The screws 4 are loosened and the gage is extended vertically until it meets the edge of the casing or jamb. The screw which holds the two upper members 5 and 6 together is loosened as well as the thumb screws 14, which hold the spacing members 8—9 and 11—12 together. The sides 1^a and 2^a may now be spread apart until they come into engagement with the jambs when said screws may be tightened. In Fig. 1 I have shown in dotted lines the position of the members of the frame in a door opening of any less width than that shown in the full line position. It will be obvious that as the sides are brought into the full line position from the dotted line position the spacing members will also be swung into the dotted line positions where they may be secured by means of the set screws. The position of the hinges is noted on the scale 3.

The gage is now removed and is placed on the face of a door and the latter is marked by running a pencil along the outer edge of the gage. The position for the hinges may now be marked through the holes 25. Due allowance must be made for clearance at the floor, and it is best to trim the door slightly on the edges to allow for clearance. The hinges are now applied on the door and jamb in accordance with their marked positions and the door may be immediately hung without any danger of being misplaced.

For double doors a small nail may be placed exactly in the center of the opening and the space on each side of the nail may be measured with the gage exactly as for single doors.

For closet doors, and other doors that are less than 2′ 4″ wide the top members 5 and 6 may be removed and the gage may then be used as shown in Fig. 7. This illustration of my device will suffice for a thorough understanding of the construction.

In Fig. 9, I have shown a marking device. This device may be attached to the side of the scale members, as shown in Fig. 1 at 18 and the plunger 21 may be shifted from horizontal to vertical position for marking the position of the hinges.

It will thus be seen that I have provided a device having a number of appliances which may be readily assembled or taken apart and which may be folded into a small compass when not needed.

I claim:

1. In a gage, a pair of members U-shaped in cross section each having a scale on its outer face, a slidable member arranged to enter each of said U-shaped members, each of said slidable members being provided with a scale on its outer face, a similar U-shaped member and a slidable member adapted to enter therein securing the upper end of the first mentioned U-shaped member, a pair of spacing members pivotally secured to said first mentioned U-shaped member, a similar pair of spacing members secured to said slidable members, said spacing members comprising a pair of bars pivotally connected together, each bar having an arc-shaped arm provided with a slot adapted to register with the slot in the other arm, and means arranged to project through said slots for securing said arms together.

2. In a gage, a pair of telescopic side members, a telescopic top member secured to said side members, a pair of spacing members secured between said side members, each of said spacing members comprising a pair of bars pivotally connected together, each bar having an arc-shaped arm provided with a slot adapted to register with the slot in the other arm, and means arranged to project through said slot for securing said arms together.

CARL E. ROSE.

Witnesses:
CHAS. W. SCHAEFFER,
E. B. HARSCH.