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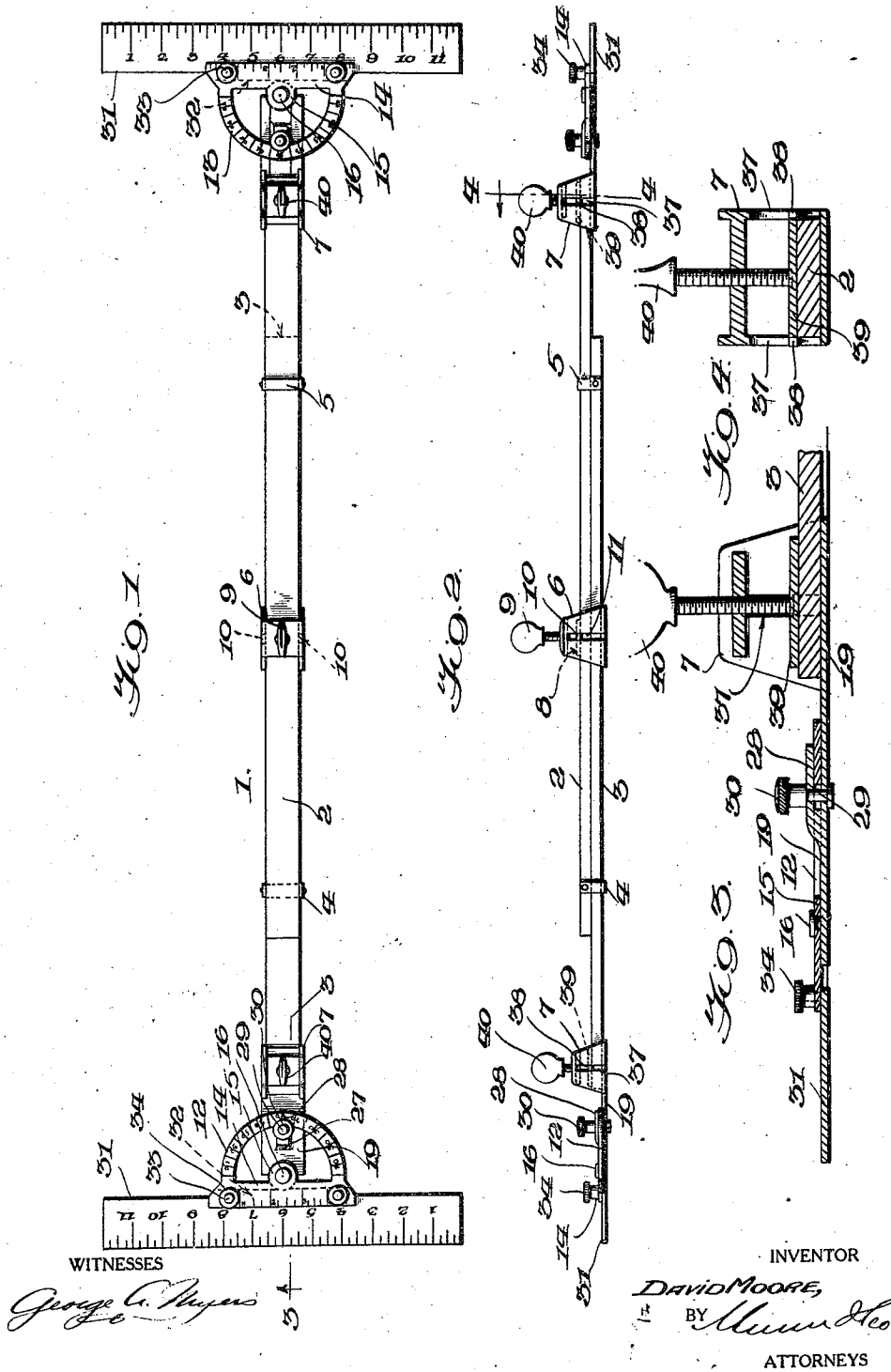
D. MOORE

1,601,138

CARPENTER'S SCRIBING GAUGE

Filed March 6, 1926

2 Sheets-Sheet 1



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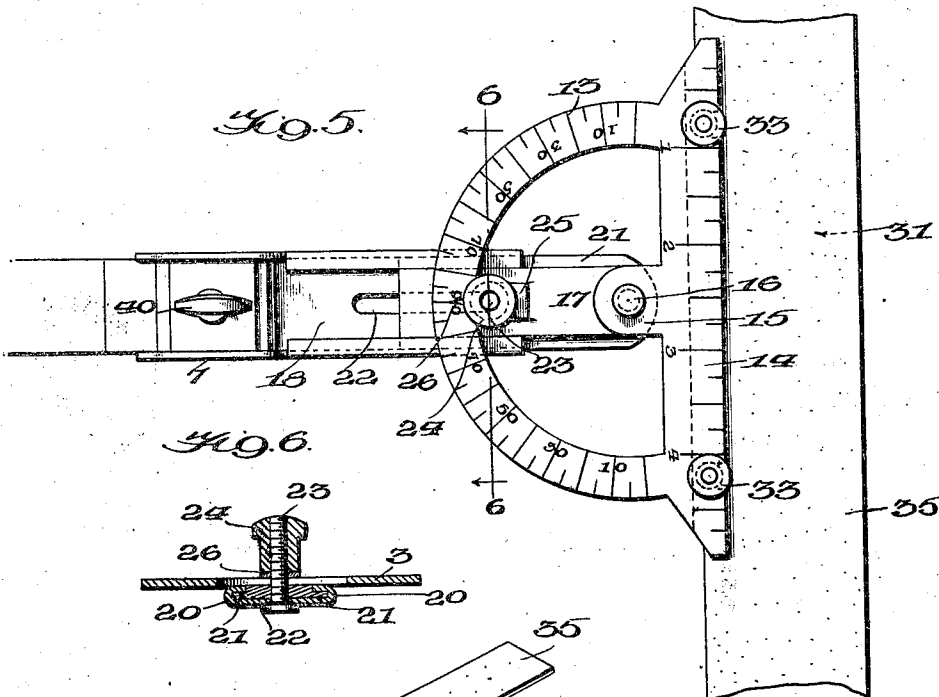
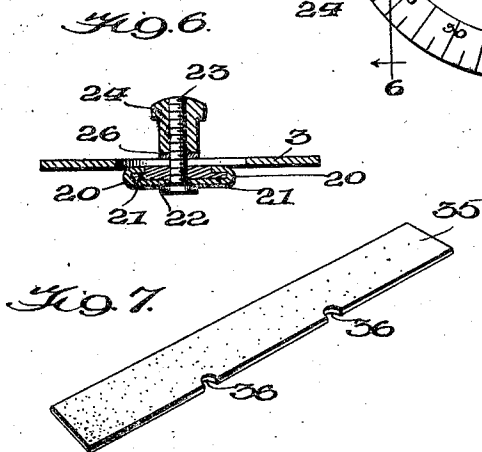
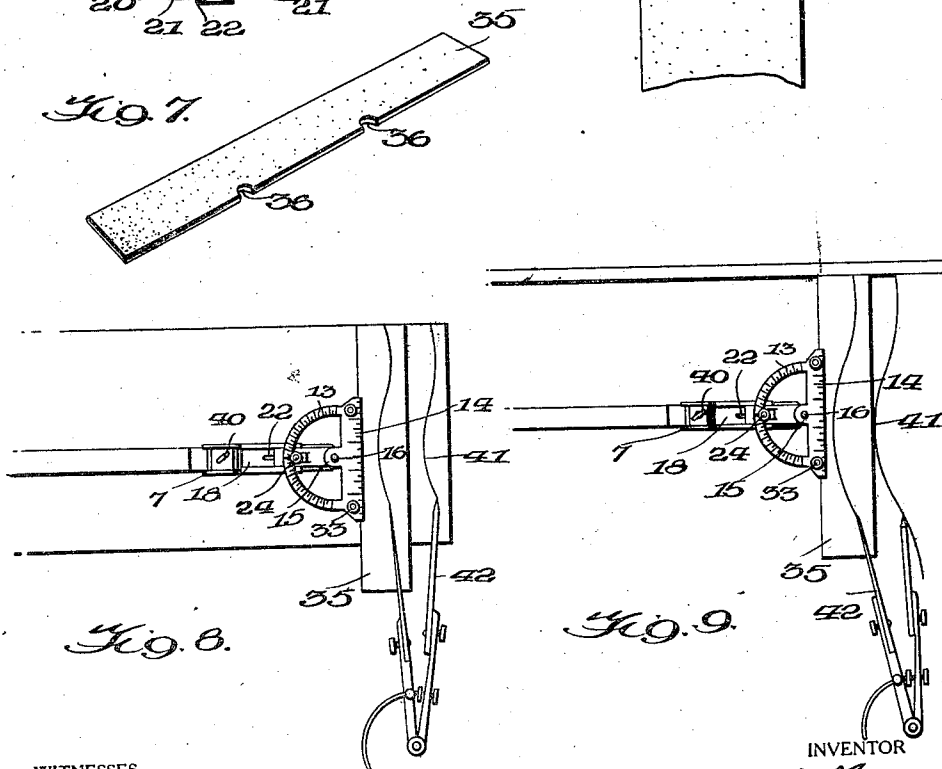
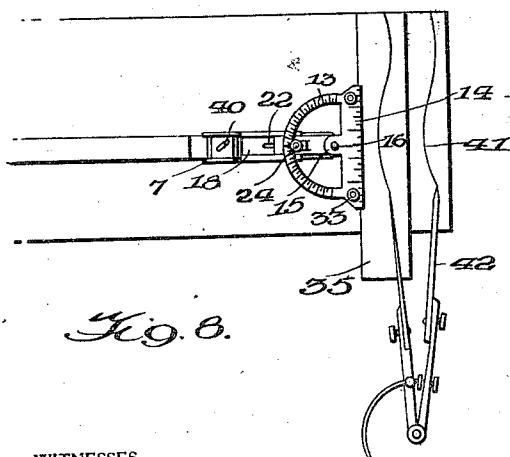
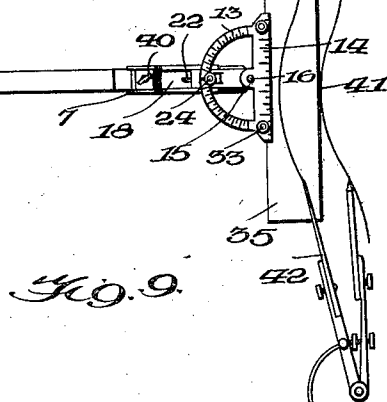
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D. MOORE

CARPENTER'S SCRIBING GAUGE

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2 Sheets-Sheet 2



WITNESSES
George C. Meyer

INVENTOR
DAVID MOORE,
BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

DAVID MOORE, OF SOUTH LANCASTER, MASSACHUSETTS.

CARPENTER'S SCRIBING GAUGE.

Application filed March 6, 1926. Serial No. 92,919.

This invention relates to improvements in measuring instruments, being adapted particularly for use in carpentry, and it consists of the constructions, combinations and 5 arrangements herein described and claimed.

An object of the invention is to provide a so-called scribing gauge which consists mainly of an extensible body carrying scribing plates and protractor heads at the ends 10 for numerous uses in carpentry, among which cutting stair threads, fitting shelves and baseboards, etc. may be cited as examples.

Other objects and advantages will appear in the following specification, reference being had to the accompanying drawing, in which

Figure 1 is a plan view of the improved scribing gauge.

Figure 2 is a side elevation.

Figure 3 is a detail section of one end of the gauge taken substantially on the line 3—3 of Figure 1.

Figure 4 is a detail cross section of one 25 of the clamps taken on the line 4—4 of Figure 2.

Figure 5 is a detail plan view of the extensible end of the gauge.

Figure 6 is a detail cross section on the 30 line 6—6 of Figure 5.

Figure 7 is a detail plan view of one of the paper covers for the scribing plate.

Figures 8 and 9 are detail plan views illustrating the method of employing the paper covers in producing and copying a profile. 35

In carrying out the invention provision is made of a main body 1 which, because of the fact that it is preferably composed of relatively movable bars 2 and 3, is herein known as the extensible body. These bars carry loops 4 and 5 which embrace the complementary bar as shown in Figure 2 thereby serving to guide the bars as they are slid 45 relatively to each other when making adjustments of the gauge between points. A clamp 6 fixes the adjustment of the extensible body. This clamp is similar to the clamps 7, referred to later, but has the distinction of serving the sole purpose of holding the bars of the body together. The clamp includes a plate 8 upon which the thumb screw 9 bears. The plate has end lugs 10 which ride in slots 11 for guidance. 50

Situated at the extremities of the extensible body are protractor heads 12 and 13.

These include cross bars 14 which have lugs 15 by which pivots 16 are mounted. The pivot 16 in the case of the protractor 13, is carried by an extensible end 17 (Fig. 5) 60 which is slidable upon the plate 18 of the adjacent clamp 7. The plate 19 of the other clamp 7 is different. The plate 18 has bent edges 20 (Fig. 6) in which the flanges 21 of the extensible end 17 ride. 65

A slot 22 in the clamp plate 18 receives the screw 23 of the clamp nut 24. The extensible end 17 has an upstanding portion 25 through which the screw 23 extends. The extremity of the upstanding portion terminates in a pointer 26 which is spaced from the surface of the end 17 a sufficient distance to receive the protractor 13. The calibrations of the protractor can be read in reference to the pointer, and upon turning 75 down upon the nut 24 the pointer end of the upstanding portion 25 is borne down upon the protractor head, thereby clamping it in the desired adjusted position.

In respect to the protractor 12 the extensible end feature, described in connection with the protractor 13, is omitted. The clamp plate 19 has an upstanding portion 27 terminating in a pointer 28, the screw 29 passing through in the manner already described 85 and carrying a nut 30 by means of which the adjustments of the protractor 12 are fixed.

Each of the scribing plates 31 has a sufficiently wide flange 32 along the edge opposite to the numbered calibrations shown, to support a pair of studs 33 upon which nuts 34 are screwed. These nuts ordinarily hold the scribing plates in firmly fixed positions upon the cross bars 14, but either or both 95 pairs of nuts may be loosened sufficiently to permit the insertion of a paper cover 35 (Fig. 7) beneath that part of the cross bars falling to that side of the studs within the scribing plates. In other words, the paper 100 covers 35 are the same in size as the scribing plates, and are intended to be clamped in place upon the plates for a purpose such as illustrated in one instance in Figures 8 and 9. The paper covers 35 have notches 105 36 to receive the screw studs 33.

It has been stated that the clamps 7 are identical with the clamp 6. The exception may be noted that the clamps 7 have clamp plates 18 and 19 whereas the clamp 6 has 110 not. Slots 37 in the sides of the clamps 7 receive the lugs 38 of small plates 39 upon

which thumb screws 40 bears. The purpose of the clamps 7 is to permit removal of the extensible body 1. A single bar may be employed, or if the relatively movable bars 2 and 3 are not sufficiently long to permit a desired adjustment of the gauge they may be replaced by longer bars which in that instance will be inserted in the clamps 7.

The operation is readily understood. Although the drawing illustrates the use of a pair of relatively movable bars 2 and 3 as the main body of the gauge, it should be understood that in some instances it is preferable to use but a single bar, and in that connection the use of the clamps 7 has already been described. The double bar arrangement has the advantage of permitting numerous adjustments of the gauge, and in practice it will be optional with the carpenter whether one or the other of the two arrangements is employed.

The uses of the gauge in carpentry are so numerous that it would be difficult to name all of them. One or two examples will be sufficient. Say that a number of shelves are to be fitted in a closet. The gauge is placed in the position to be occupied by the shelves and extended until the scribing plates 31 touch the walls at the longitudinal extremities of the space. The gauge is then removed and laid upon a pile of boards (assuming that a number of shelves are to be cut) the upper one of which is marked off across the edges of the scribing plates.

It may be that one end wall is not parallel with the other. In such case one or the other of the clamp nuts 30 can be loosened and the respective scribing plate 31 adjusted upon the pivot 16 until it fits flush against said wall. The same mode of operation applies when fitting baseboards in closets and small rooms, cutting stair treads, etc. The gauge is also adapted to fitting box or window casings, and in such event the scribing plates 31 are removed from the cross bars 14 of the protractors 12 and 13. The cross bars will then serve the same function in respect to fitting the window casing as did the scribing plates 31 in the other uses mentioned.

A further and important use is illustrated in Figures 8 and 9 wherein the paper cover 35 is involved. Reference is made to Figures 8 and 9. The carpenter may find it necessary to fit a board against a curved surface such as illustrated at 41. A paper cover is clamped upon one of the scribing plates, and the gauge is adjusted until the scribing plate is brought to the curved surface in about the relationship shown. The dividers 42 are fixed in about the position shown, one leg being run along the curved surface while the other traces a line upon the paper cover 35.

It is intended that the paper cover shall be

of sufficiently heavy material to permit considerable pressure to be brought upon the scribing point of the dividers, thereby making a line sufficiently deep to be retraced when the gauge is transferred to the board B in Figure 9. Having transferred the gauge the carpenter traces the previously inscribed line with one leg of the divider while the other leg is made to trace a line upon the end of the board. Upon carefully cutting the board along the traced line the carpenter will have a profile which is the exact duplicate of the curve 41. In some instances it may be found well to cut the paper cover 35 along the line inscribed thereon, but whether or not this is done is optional with the carpenter. On the foregoing principle the paper cover 35 may be employed to enable fitting boards up to almost any kind of irregular surface, and it is immaterial whether the lines of such surface be straight or curved.

While the construction and arrangement of the improved carpenter's scribing gauge is that of a generally preferred form, obviously modifications and changes may be made without departing from the spirit of the invention or the scope of the claims.

I claim:—

1. A gauge comprising a main body, plates having clamps by means of which they are affixed to the extremities of the body, a protractor head having a cross bar and lug through which pivotal support is had upon each of the clamp plates, scribing plates having studs insertable through said cross bars and nuts upon said studs for clamping the scribing plates in position upon the cross bars of said protractor head.

2. A gauge comprising a main body, a protractor head having a cross bar for each end of the main body, clamping means by which the protractor heads are applied to the extremities of the main body, said clamping means comprising a plate upon which one of the protractor heads is pivotally mounted at the cross bar thereof, and an extensible end upon which the other protractor head is pivotally mounted at the cross bar thereof, said extensible end being adjustably carried by a clamp plate of the associated clamping means; a scribing plate for each protractor head, and means to removably clamp the scribing plates to the cross bars of said heads.

3. A gauge comprising a main body, protractor heads for the ends of the body, clamping means by which the protractor heads are attached to the extremities of the body, said means including plates, means by which the protractor heads are pivotally mounted upon the respective plates, upstanding portions formed from said plates terminating in pointers being in spaced relationship to the plates thereby providing a

space in which the protractor head can move, and means associated with the plates and pointers for clamping the pointers down upon the protractor heads when the latter are adjusted upon their pivots.

4. A gauge comprising a main body, protractor heads for the ends of the body, means for clamping the protractor heads upon the extremities of the body, said means including plates, means pivotally mounting the protractor heads upon the plates permitting turning of the heads, an upstanding portion stamped from each plate terminating in a pointer in spaced relationship to the respective plates and providing a space in which the protractor can move, a screw carried by the plate and passing through the respective pointer at one side of the protractor head, and a nut upon each screw permitting clamping down upon the pointer thereby to hold the respective protractor heads in the position to which it has been adjusted upon its pivot.

5. A gauge comprising a main body, a protractor head for each end of the body, 25 clamping means by which the protractor heads are secured to the extremities of the body, said means including plates, cross bars included in said protractor heads having lugs which are pivotally mounted upon said 30 plates, scribing plates attachable to the heads along one edge, screw studs carried by said flanges passing through openings in the cross bars of the protractor heads, and nuts upon said screws for clamping the 35 scribing plates in position against the cross bars.

6. A gauge comprising a main body, scribing plates mounted upon the extremities of the body, a cover for each scribing plate 40 permitting the inscription thereon of an irregular surface to be fitted, and means to clamp said cover in position upon the respective scribing plates.

DAVID MOORE.