

(No Model.)

W. T. GAGNEBIN.
STAIR BUILDER'S TOOL.

No. 482,350.

Patented Sept. 13, 1892.

Fig 1

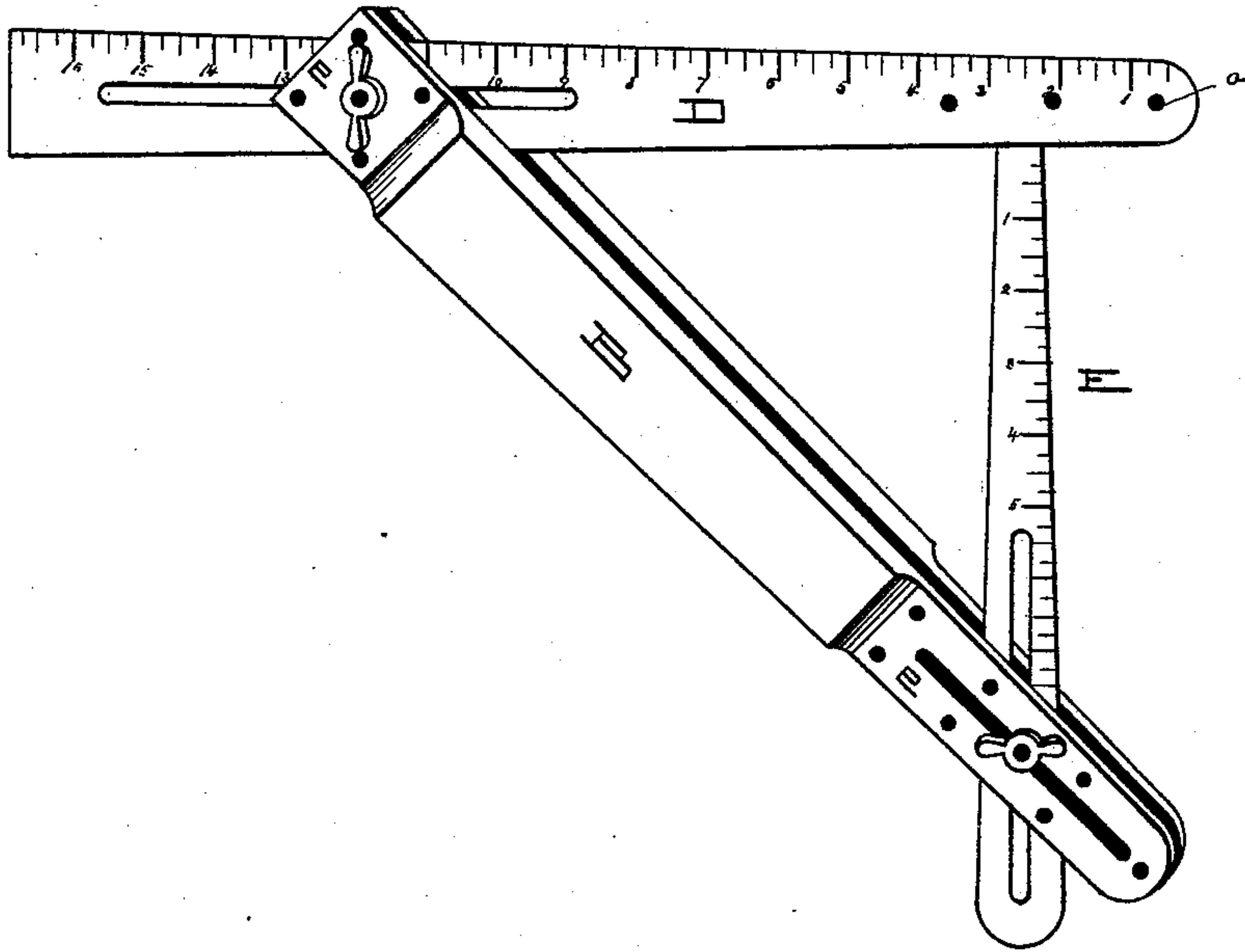


Fig 2

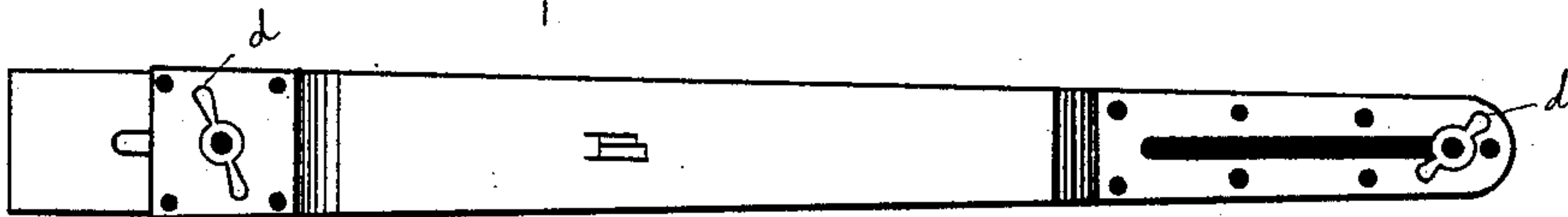
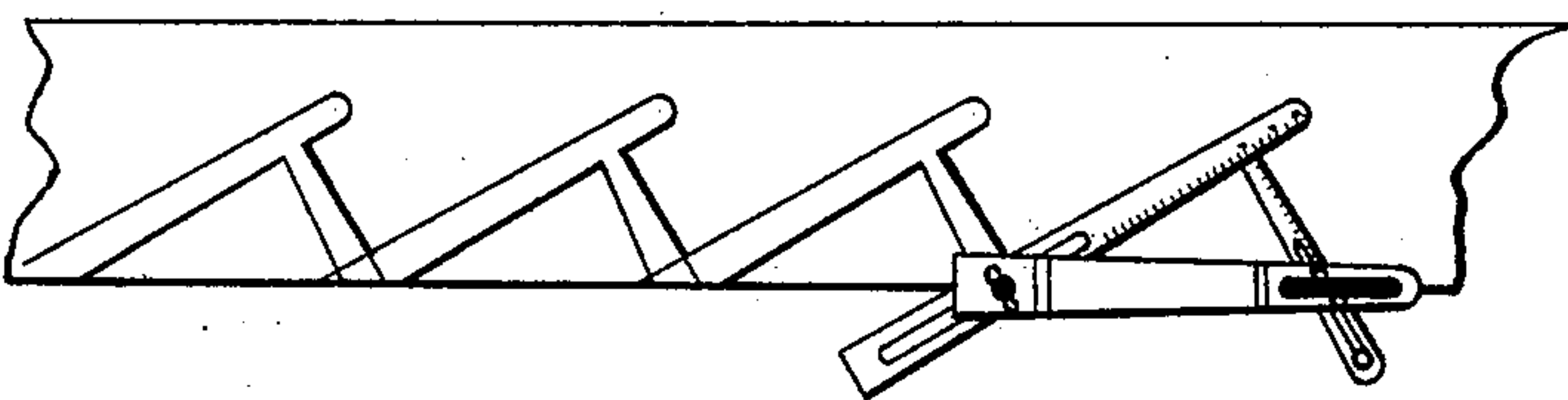


Fig 3



WITNESSES:

Frank Chrysler.
Cecil H. Cookson.

INVENTOR

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UNITED STATES PATENT OFFICE.

WILLIAM T. GAGNEBIN, OF OMAHA, NEBRASKA, ASSIGNOR OF ONE-HALF TO
WILSON T. GRAHAM, OF SAME PLACE.

STAIR-BUILDER'S TOOL.

SPECIFICATION forming part of Letters Patent No. 482,350, dated September 13, 1892.

Application filed November 24, 1890. Serial No. 372,541. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. GAGNEBIN, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Stair-Builders' Tools; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has relation to an improved stair-builder's tool.

The object of this invention is to provide a neat compact adjustable tool that may be used for all purposes where an ordinary bevel-square might be employed, with the addition that it may be made to serve as a double bevel by virtue of its two adjustable blades.

The primary object of this invention is to provide a stair-builder's tool that shall be adjustable and adapted to be used in all cases, taking the place of the pitch-board and housing-pattern ordinarily used by the builders in constructing stairs; and in furtherance of this object the invention consists in the construction, combination and arrangement of parts, as hereinafter more fully described, and finally pointed out in the claims.

Figure 1 is a perspective view of my invention as adjusted when used as a stair-builder's tool. Fig. 2 shows a top view of the same when out of use and clasped, and Fig. 3 illustrates my device as employed in marking off the risers and treads upon a strain-board.

B represents the stock of my tool, composed of two similar parts, made of wood or other suitable material, which is provided at the ends with the brass facings *e e*. Adjustably working between the stocks are the two blades D and E, preferably of steel, which are held between the stocks by means of the clamp-screws *d d*, each blade being provided with a suitable slot, within which said set-screws work and by means of which the blades are adjusted. The main blade D is slightly wedge-shaped, having a square base and at the end terminating in a regular semicircle. Upon

the upper edge upon both sides the blade is provided with a scale in inches, as illustrated, while near the tapered end, to insure a snug housing, I provide a suitable opening *a* within the blade, which establishes the center for the auger in cutting the nosing. This blade, by means of its slot, may be adjusted longitudinally to suit any desired tread, the length of which is determined by means of the scale. The riser-blade E is also provided with a scale upon the outer edge, and in addition to its longitudinal adjustment may be adjusted laterally by means of its set-screw, which is adapted to work within suitable slots of the stocks, as shown. By this means any desired nosing may be obtained. It will be noticed that both the blades are wedge-shaped, the smaller one having its base at its upper end, so as to insure a neat fit against the lower edge of the main blade D, as shown. This is done to form the space for the necessary wedge-seat both under the tread and behind the riser. The blades are, further, both angularly and longitudinally adjustable, so that the blades may at all times be locked at right angles one to another and at any angle to the handle. It will be seen that by means of the adjustable blades the tool may be set to any pitch and that the tread and riser may both be marked off at the same time, by this means saving much time and labor besides insuring a neat and snug fit; but this does not end the utility of my invention. For the purpose of framing rafters or any other work where two different bevels are to be cut on the same line or in cutting the bevels and twists for rails it will be found that by means of the graduated adjustable blades it may be used to full advantage, as will be readily understood by all practical mechanics.

Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

1. In a stair-builder's tool, the combination of a stock provided at one end with a fixed and at the other with a sliding binding-post, said fixed post supporting and holding an adjustable main blade, said blade being graduated and tapering from a square base to a round end and adapted to form the tread and nosing of a pitch-board, and a slotted gradu-

ated auxiliary blade tapering from a rounded
to a square end and adjustable upon said
sliding binding-post and adapted to form the
riser of a pitch-board, all arranged to operate
5 substantially as and for the purpose set forth.

2. As an improved article of manufacture,
a stair-builder's tool comprising the two-part
stock A, having a fixed and a sliding bind-
ing-post adapted to accommodate the gradu-
10 ated and adjustable blades D and E, as shown,
said stock and blades being adjustable and
adapted to form, in combination, respectively,

the base-line, tread, nosing, and riser of a
pitch-board, each of said instrumentalities
being independently adjustable to any de- 15
sired measurement, substantially as and for
the purpose set forth.

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

WILLIAM T. GAGNEBIN.

Witnesses:

JAMES L. BLACK,

GEO. W. SUES.