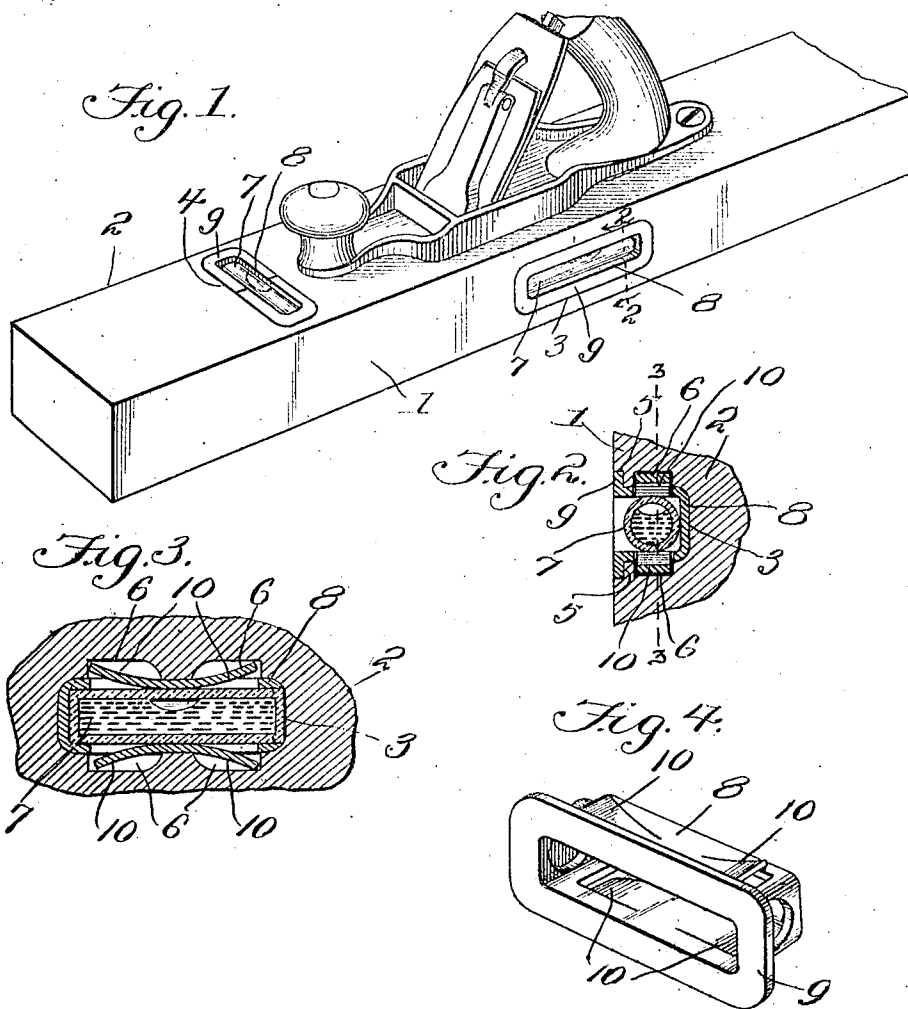


B. R. STURGIS.
COMBINATION PLANE.
APPLICATION FILED JULY 3, 1917.

1,292,969.

Patented Jan. 28, 1919.



WITNESSES

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COMBINATION-PLANE.

1,292,969.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BENJAMIN R. STURGIS, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Combination-Planes, of which the following is a specification.

This invention relates to improvements in spirit levels and has for its primary object to provide means whereby a spirit level may be connected to a suitable support, as for instance, a carpenter's plane.

Other objects and advantages will appear as the nature of the invention is more fully understood, reference being had to the accompanying drawings, in which,

Figure 1 is a perspective view of an ordinary carpenter's plane having spirit levels secured thereto in accordance with this invention.

Fig. 2 is an approximately central sectional view on the line 2—2 of Fig. 1, taken on an enlarged scale.

Fig. 3 is a longitudinal sectional view approximately on the line 3—3 of Fig. 2.

Fig. 4 is a perspective view of the level removed from the plane.

Mechanics, especially carpenters, find frequent use for levels, and as it requires a considerable loss of time for the mechanic to drop tools with which he is operating in order to obtain the level, it is my purpose to provide means whereby a level bulb may be readily attached to such tools. From experience, I have found that during the process of planing lumber, especially when the same forms part of or is rigidly attached to a portion of a building, the use of a level is most frequently required, and, therefore, in the drawings, I have illustrated the same in connection with an ordinary carpenter's plane. The base or bottom surface of such planes is almost invariably arranged at a true right angle to the sides thereof and upon the side 1 of the plane 2, I make a longitudinal incision indicated by the numeral 3, and likewise, upon the top of the plane, forward of the front thereof, I arrange a similar incision 4, the longitudinal walls of the latter being at a right angle with respect to the parallel or horizontal walls of

the incision 3. Also I rabbet or depress both the side and top of the plane around the incisions 3 and 4 as indicated by the numeral 5. The opposite or parallel walls provided by both the incisions 3 and 4 at spaced intervals, are notched as at 6, and the purpose of this arrangement will be presently described.

The water carrying bulb is indicated by the numeral 7 and is arranged in a suitable casing 8, the outer and open face of the casing being provided with a flange 9 that is designed to be snugly received in the depressed or rabbeted portions 5 of the plane, while the body of the casing 8 is of a size to be snugly received in either of the depressions 3. The body of the casing 8 is preferably constructed of metal having an inherent resiliency. I slit the opposite or longitudinal walls of the casing both longitudinally and transversely, and I bend the metal bounded by the said slits outwardly forming spring tongues 10. These tongues are so disposed as to spring into the notches 6 in the opposite longitudinal walls provided by the depressions 3 and 4, and thus the level bulbs are easily and quickly secured in the depressions of the plane, the flanges 9, as previously stated, being received in the rabbets or depressions 5 are arranged flush with the outer surface of the plane.

Having thus described the invention, what I claim is:

In combination with a support having a depression therein, the opposite longitudinal walls of which are provided with spaced notches, said support being rabbeted around the depression, a bulb-carrying casing having its outer edge provided with a continuous flange designed to be received in the rabbeted portion of the support, said casing being constructed of spring material and having its opposite longitudinal walls slitted longitudinally and transversely and the metal bounded by said slits bent outwardly to form spring tongues which are designed to be received in the notches to hold the casing in the depression.

In testimony whereof I affix my signature.

BENJAMIN R. STURGIS.