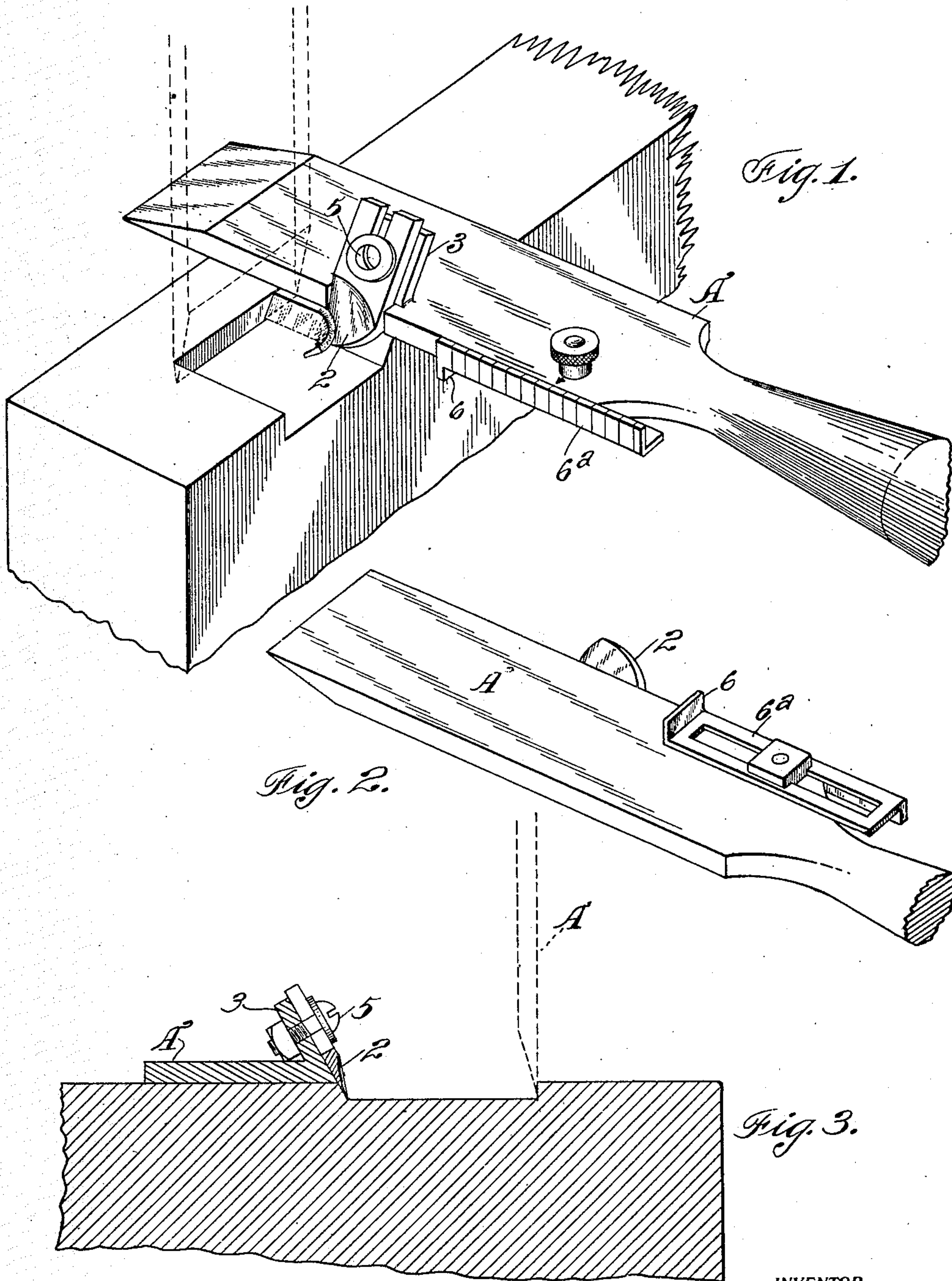


No. 860,544.

PATENTED JULY 16, 1907.

J. E. HOWELL.
BUTT CHISEL.

APPLICATION FILED NOV. 12, 1906.



WITNESSES:

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JOHN E. HOWELL, OF UKIAH, CALIFORNIA.

BUTT-CHISEL.

No. 860,544.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed November 12, 1906. Serial No. 343,036.

To all whom it may concern:

Be it known that I, JOHN E. HOWELL, a citizen of the United States, residing at Ukiah, in the county of Mendocino and State of California, have invented new and useful Improvements in Butt-Chisels, of which the following is a specification.

My invention relates to a tool which is especially designed for cutting the seats for butt hinges, and like work.

10 It consists in the combination of a chisel, cutter and gage, and in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

15 Figure 1 is a perspective view of the tool. Fig. 2 is a similar view of the underside thereof. Fig. 3 is a section through the blade and chisel.

It is the object of my invention to provide a device by which the seats for butt hinges may be rapidly and accurately cut.

20 As shown in the drawing, A is a chisel. This chisel has a sunken channel made transversely in one edge, and in this channel is fitted a cutting blade 2. This blade is slidable on a support 3, which is fixed to the chisel, and the blade is slotted and secured by a clamping screw 5.

25 The size of the hinge which is to be used being determined, it is usual to lay out the outline of the seat by a longitudinal and transverse scribing mark, so that when the portion included between these marks has been excavated, the leaf of the hinge will just fit the excavated portion, and its upper surface will lie flush with the surface of the wood. This outline having been marked out and the thickness of the hinge leaf being ascertained, the cutting blade will be set so as to cut a depth equal to the thickness of the leaf. The gage 6^a which is also slotted and adjustable, will be set with the downwardly projecting flange 6 at such a point that it will strike the edge of the wood which is being cut for the hinge at the instant when the cutting edge of the blade has reached the inner line of the proposed seat for the hinge. The blade is preferably set at an incline, as shown.

30 The operation will then be as follows: The chisel being laid flatwise upon the part where the hinge seat is to be cut, and this part being held firmly, by pushing the chisel transversely across it, the cutter will shear away a portion of the wood at each impulse of the chisel across the wood, the chisel being advanced in the direction of the length of the seat after each cut. Thus with a sufficient number of cuts, the whole length and width of the seat will be excavated. The inclined position

of the blade causes it to cut the wood more smoothly and easily than if it was exactly vertical. At the end where the cuts are finished, there will be an incline on account of the incline position of the cutting blade; and this may be afterwards made vertical by turning the chisel until the cutting edge stands in a vertical position, and then making a final cutting with it. The excavation or seat will have very nearly a perfect surface, but it may be finished by the use of the edge of the chisel, which may be passed over the surface like a plane, and the vertical longer side may also be trimmed and planed by the use of the chisel in the same manner.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

1. The combination of a chisel blade and a separate cutter carried thereby, the cutting edges of the chisel and cutter being arranged one at an angle to the other.

2. A tool for cutting seats for hinges, said tools consisting of a channeled endwise cutting member, and a cutting blade fixed in the channel thereof in a plane substantially at right angles to the plane of movement of said member, said blade extending above and below said member and having its cutting edge arranged at an angle to the cutting edge of said member and adapted to cut transversely at each forward impulse of said member.

3. A tool for cutting seats for the leaves of butt hinges, said tool including a handled-plate or chisel having an inclined channel made in one edge, a blade slidable and adjustable in said channel in a plane substantially at right angles to the plane of the cutting edge of the chisel, and having its cutting edge along one of its long sides and projecting below the chisel blade, a support for the blade, and a set-screw whereby the blade may be adjustable with relation to the support.

4. In a device for cutting seats for butt hinge-leaves, a chisel-blade having an inclined channel made in one edge, and a support substantially flush with the plane of said channel, a slotted blade slidable upon the support, a set-screw by which the blade may be locked with its cutting-edge adjusted below the lower surface of the chisel-blade, and an adjustable stop fixed to the edge of the chisel, said stop limiting the length of the transverse cut.

5. In a tool for cutting seats for butt hinge-leaves, a chisel-blade having a handle, an incline slot or channel made in one edge of the blade, a support fixed to the blade substantially flush with the plane of inclination of the slot, a cutting blade slotted and slidable upon the support, a clamping screw by which the said blade may be adjusted to cut a pre-determined depth below the lower surface of the chisel, a slotted-stop-plate fitted slidably upon the edge of the chisel, and a locking screw by which it may be set at any adjustment.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN E. HOWELL.

Witnesses:

S. H. NOURSE,

FREDERICK E. MAYNARD.