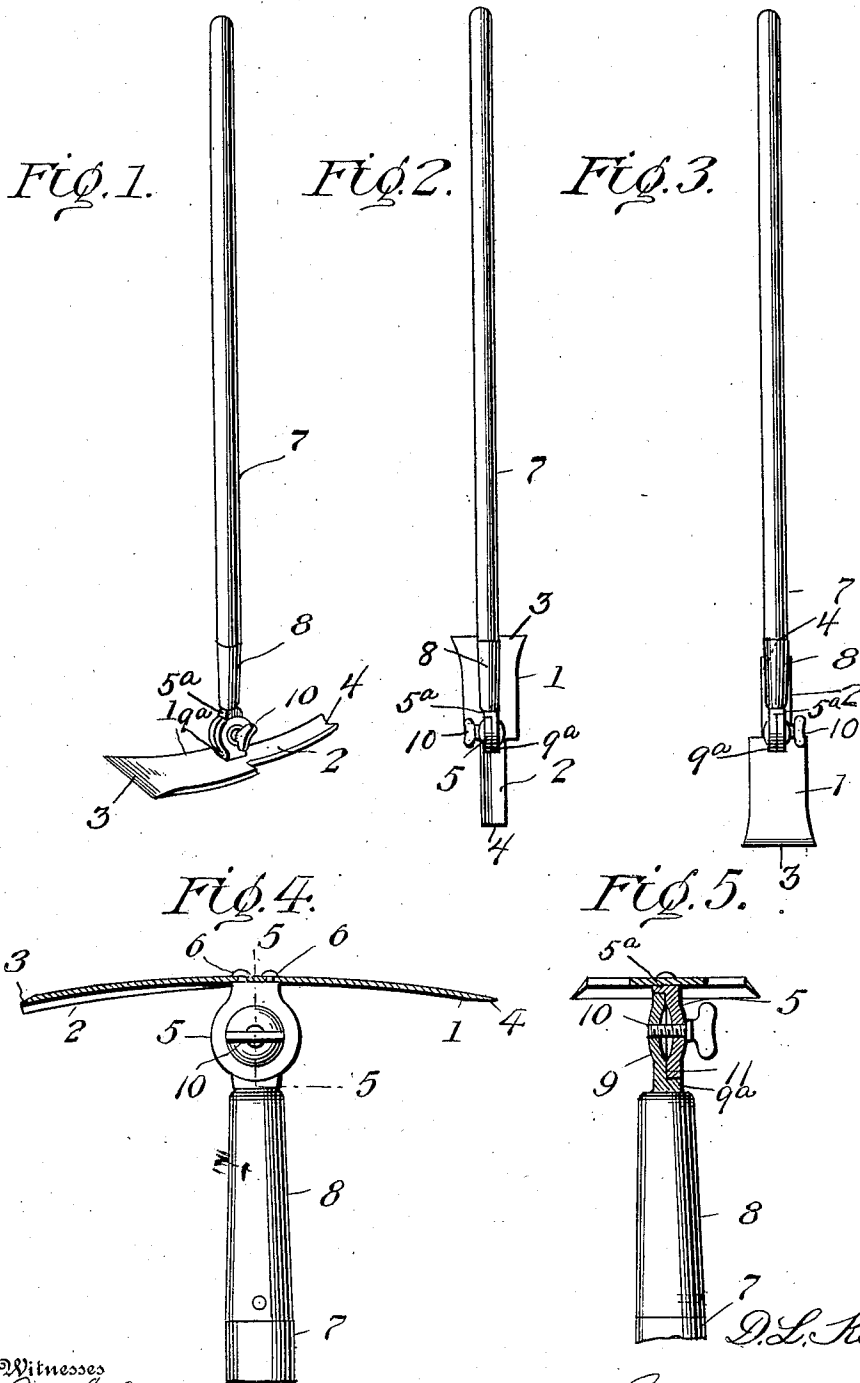


No. 824,123.

PATENTED JUNE 26, 1906.

D. L. KENT.
GARDENING TOOL.
APPLICATION FILED AUG. 26, 1905.



Witnesses
Geochelman Jr.
Bernard P. Jackson

Inventor
D. L. Kent,
By *Geo. S. Vanhook*
Attorney

UNITED STATES PATENT OFFICE.

DARWIN L. KENT, OF LESLIE, MICHIGAN.

GARDENING-TOOL.

No. 824,123.

Specification of Letters Patent.

Patented June 26, 1906.

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To all whom it may concern:

Be it known that I, DARWIN L. KENT, a citizen of the United States, residing at Leslie, in the county of Ingham and State of Michigan, have invented new and useful Improvements in Gardening-Tools, of which the following is a specification.

This invention relates to gardening-tools, and has for its objects to produce a comparatively simple inexpensive device of this character which may be readily utilized as a hoe, weed-cutter, or scraper, one wherein the blade may be quickly adjusted to adapt the device for its various uses, and one wherein the blade may be conveniently locked in its adjusted positions.

A further object of the invention is to provide a device of this character in which the clamping members or jaws will be firmly and securely engaged, respectively, with the handle and blade, and one wherein the clamping-screw will act positively in connection with said jaws for fixing the blade in adjusted position.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view of a device embodying the invention. Fig. 2 is an elevation showing the blade adjusted for bringing the weed-cutting portion into play. Fig. 3 is a similar view showing the device adjusted for use as a spade. Fig. 4 is an enlarged detail view, partly in section, the section being taken centrally and longitudinally through the blade. Fig. 5 is a sectional elevation, the section being taken on the line 5 5 of Fig. 4.

Referring to the drawings, 1 designates the blade of the tool, having a reduced extension 2, preferably of curved form in cross-section, and provided with a sharpened cutting end 3, the blade being likewise sharpened at 4. Carried by the blade is a substantially circular bearing member or head having a pair of integral attaching elements or studs 6 in head-engagement with suitable openings or perforations formed in the blade 1 at a point adjacent the longitudinal center thereof and at the juncture of the blade and its extension 2, these studs serving to firmly and securely attach the bearing-head 5 to the blade.

The blade is equipped with a handle 7, seated at its normally lower end in a ferrule 8, on which is formed a substantially circular

bearing member or head 9, similar to and detachably engaged with the head 5 by means of a clamping member or screw 10, threaded through suitable openings provided in the heads, which latter are of relatively reverse concavo-convex form to present marginal bearing-faces 11, designed through frictional engagement under the action of the clamping member 10 for fixing the blade in adjusted positions.

In practice the heads 5 and 9 may by proper manipulation of the screw 10 be released for relative movement to permit adjustment of the blade 1 to proper position for performing its various functions, it being understood that after adjustment the blade may be fixed by tightening the screw 10 and drawing the bearing-faces 11 into secure frictional contact. When the blade is adjusted as seen in Fig. 1, it may be utilized as a hoe or the extension 2 may be brought into play for chopping weeds or the like, while an adjustment of the blade to the position illustrated in Fig. 2 permits the employment of the extension 2 for digging and cutting roots, a further adjustment of the blade, as illustrated in Fig. 3, being possible to permit employment of the tool as a spade or for operating over the surface of the ground, under which conditions the lower portion of the handle will seat within the concaved face of the extension 2, thereby obviating lateral movement of the blade and relieving strain upon the bearing-heads and the connecting-screw.

The bearing-head 5 has an angular offset 5^a at the end, which is attached to the blade to form a bearing-shoulder for the head 9 and to prevent the terminal of said head adjacent to the blade from having wearing contact on the blade. The head 9 also has an offset or shoulder 9^a to receive the upper end or terminal of the head 5. These offsets or shoulders also provide for bringing the two heads in close relation, and the concaved faces of the two heads coincide when the heads are assembled. Hence when the clamping-screw 10 is inserted through the heads and tightened up after an adjustment has been made the retention of the heads in their adjusted relation will be more positive and the blade will be less liable to slip out of adjusted position. It will be observed that the portions of the heads bearing against each other are smooth and unbroken by projections or teeth and, further, that the positive assem-

blage thereof is due solely to frictional contact of both heads with relation to each other, this frictional contact being augmented by the contiguous position of the concaved faces 5 of the heads with respect to each other and the central penetration of said portions of the heads by the clamping-screw 10.

From the foregoing it is apparent that I produce a simple device which in practice will 10 admirably perform its functions to the attainment of the ends in view, one wherein adjustment of the blade is facilitated, and one in which the blade may after such adjustment be conveniently and securely locked in 15 adjusted position, it being understood that in attaining these ends minor changes in the details of construction may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages. 20 Having thus described my invention, what I claim is—

In a tool of the class described a handle, a bearing-head fixed to the handle and having an intermediate concavo-convex contour, the 25 concavity being at the inner side, the said

bearing-head also having a shoulder on the same side as the concavity and at a distance from the latter, a blade, a bearing-head, having a single angular terminal projection disposed against and immovably secured to the 30 intermediate portion of one side of the blade, the bearing-head attached to the blade being also formed with an intermediate concavo-convex portion to operate with the concavo-convex portion of the bearing-head of the 35 handle, the angular terminal projection of the bearing-head of the blade and the shoulder of the bearing-head of the handle having such width as to flushly receive the terminals 40 respectively of the bearing-head of the handle and the bearing-head of the blade, and a clamping-screw centrally engaging the concavo-convex portions of the bearing-heads.

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

DARWIN L. KENT.

Witnesses:

GEO. W. DENNIS,
W. E. VAN CAMP.