

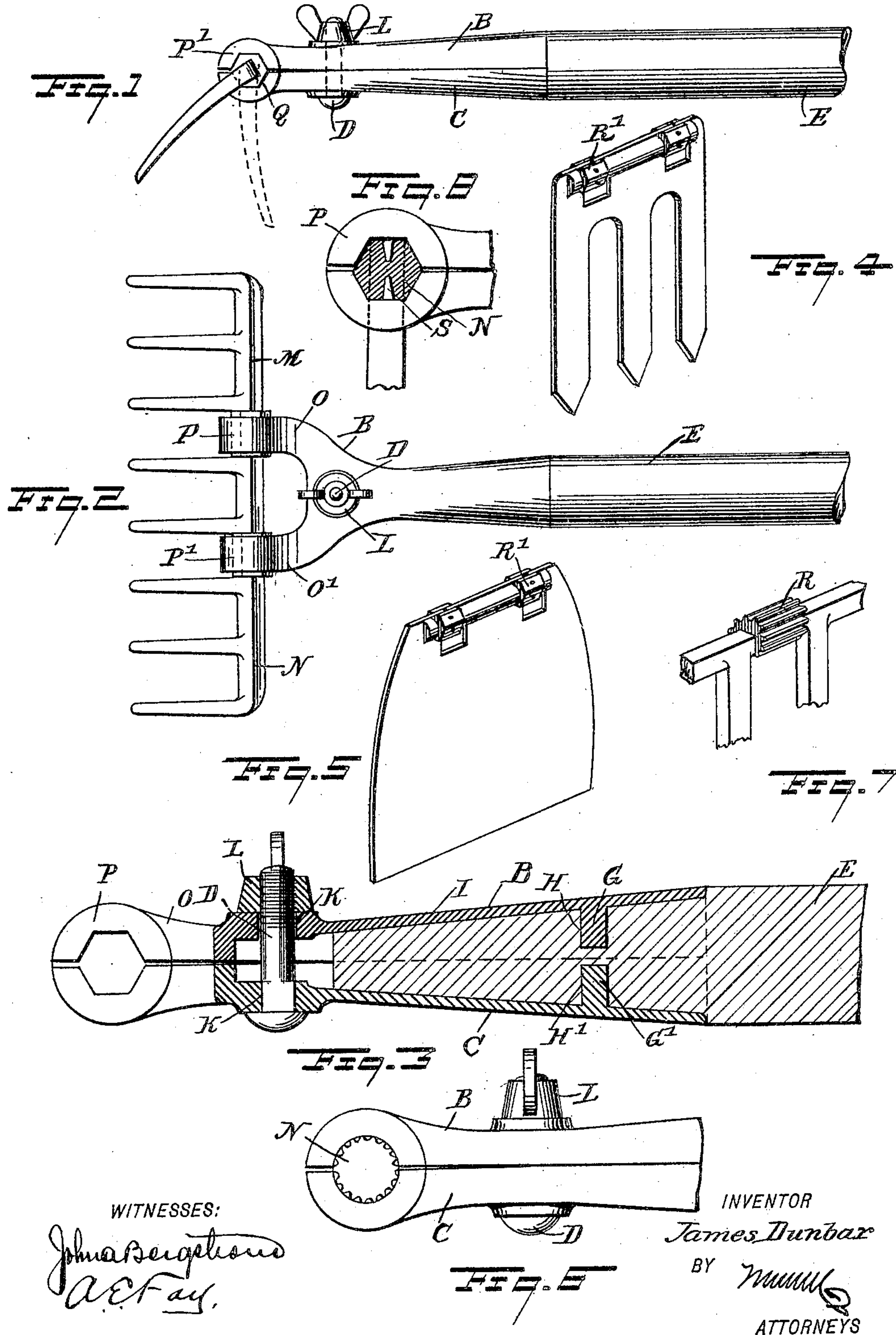
No. 820,292.

PATENTED MAY 8, 1906.

J. DUNBAR.

GRIP.

APPLICATION FILED AUG. 2, 1905.



UNITED STATES PATENT OFFICE.

JAMES DUNBAR, OF INVERCARGILL, NEW ZEALAND.

GRIP.

No. 820,292.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed August 2, 1905. Serial No. 272,339.

To all whom it may concern:

Be it known that I, JAMES DUNBAR, a subject of the King of Great Britain, and a resident of the town of Invercargill, in the Province of Otago and Colony of New Zealand, have invented a new and Improved Grip, of which the following is a full, clear, and exact description.

The invention is applicable to such tools as rakes, hoes, spades, and forks, and has for its object a means to connect the handles of rakes and hoes with the heads of such tools, enabling a broken handle to be easily replaced and the heads of same adjusted to different angles, extending their scope of usefulness, and in respect to spades and forks provides a means to connect a hand cross-piece with the shanks of these instruments to form a handle-grip.

The essential features consist in two exactly similar parts bolted together, between which are first placed the parts to be connected. The parts engaging the handle or shank are half-tubular, and branching out therefrom to the head or hand cross-piece, as the case may be, are two arms. The parts actually engaging the head or hand cross-piece are angled to prevent turning and the head or hand cross-piece angled to correspond. To give more security against movement at this point, the angled contacting faces have pin-like projections to engage holes in the opposite parts.

Reference is to be had to the accompanying drawings, forming part of this specification, in which like characters of reference indicate like parts in all the figures.

Figure 1 is a side elevation showing my invention applied to a rake. Fig. 2 is a plan of the same. Fig. 3 is a central longitudinal sectional view of the same, on an enlarged scale. Fig. 4 is a perspective view of another implement, showing how my invention may be applied to it. Fig. 5 is a similar view of a third implement. Fig. 6 is a fragmentary side elevation showing how the device can be applied to another form of tools. Fig. 7 is a perspective view of a tool adapted for use as shown in Fig. 6; and Fig. 8 is a side view of a modification, showing a rake-head in section.

The grip is formed of two main parts B and C, which are identical in shape and size, a bolt D being used to connect them and to fix a handle E or shank therein. Said parts B and C where they engage said handle or

shank are half-tubular and provided with interior pin-like projections G G' to engage holes H H' in said handle or shank. Said parts B and C are bored at K for said bolt D, which is fastened by a nut L. Branching out from the webbed portion of the grip to the tool-head M or hand cross-piece N are two arms O O', having gripping ends P P' with polygonal passages Q to engage a portion R R' of the tool-head or hand cross-piece, which is shaped to correspond with these gripping ends, and the parts with which they contact may have, respectively, pin-like projections S to enter holes or grooves, providing further security against movement of parts. To remove the handle or adjust the tool-head to the angle required, it is only necessary to unfasten the nut.

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

1. The combination with a handle or shank of a grip having two separable main parts each half-tubular where contacting with handle or shank, and having interior pin-like projections, each main part having a web with a hole through same, a bolt to fit said holes and nut for fastening, each main part having two arms, extending from the web with ends shaped to form a polygonal grip.

2. A grip having two separable main parts each half-tubular and having interior pin-like projections means for securing main parts together, arms extending from web within shaped to form a polygonal grip.

3. The combination with a tool-head of a grip having two separable identical main parts each half-tubular, and having interior pin-like projections, a handle with holes to receive said pins, a web on each main part having a hole through same, a bolt to fit said hole and nut for securing same, each part having two arms extending from web, with ends shaped to form a polygonal grip, the portion of the tool-head shaped to fit said polygonally-shaped grip.

4. The combination with a tool-head of a grip having two separable identical main parts each half-tubular and having interior pin-like projections a handle with holes to receive said pins, a web on each said main part having a hole through same, a bolt to fit said hole, and nut for securing same, each main part having two arms extending from web with ends shaped to form a polygonal grip, portions of the tool-head shaped to fit

said polygonally-shaped grip, the inside parts of said gripping ends having pin-like projections and parts of said tool-head with which they contact having holes to receive them.

5 5. The combination of a grip having two separable main parts, each main part being provided with a perforated web, means passing through the perforations in the webs for securing the two main parts together, and
10 projections extending from each of the webs,

said projections being provided with portions of a polygonal figure which when placed together constitute a grip.

In testimony whereof I have signed my name to this specification in the presence of 15 two subscribing witnesses.

JAMES DUNBAR.

Witnesses:

ERIC RUSSELL,

FRANK VICTOR RAYMOND.