## A. C. LANTZ. TOOL HANDLE AND TOOL.

(Application filed Nov. 11, 1896.)

(No Model.)

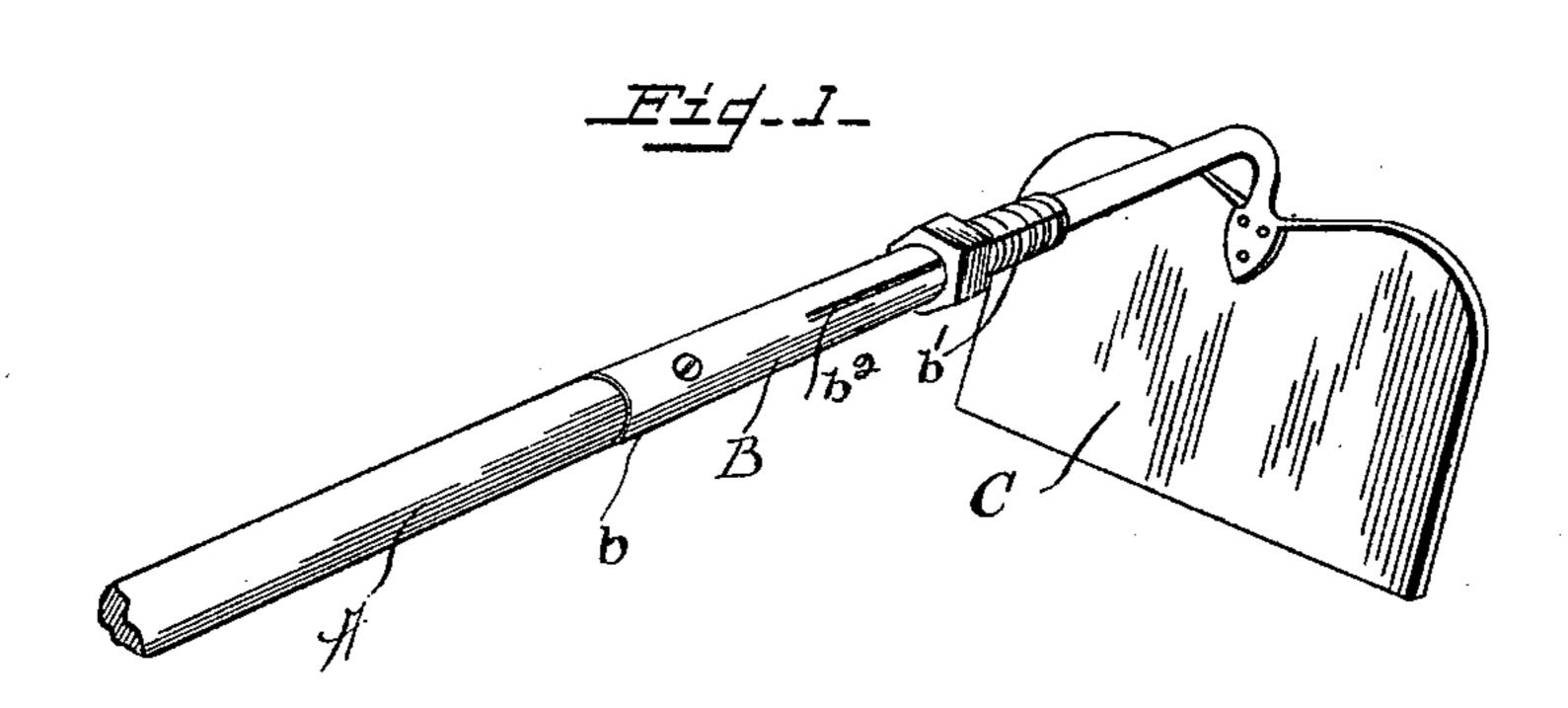
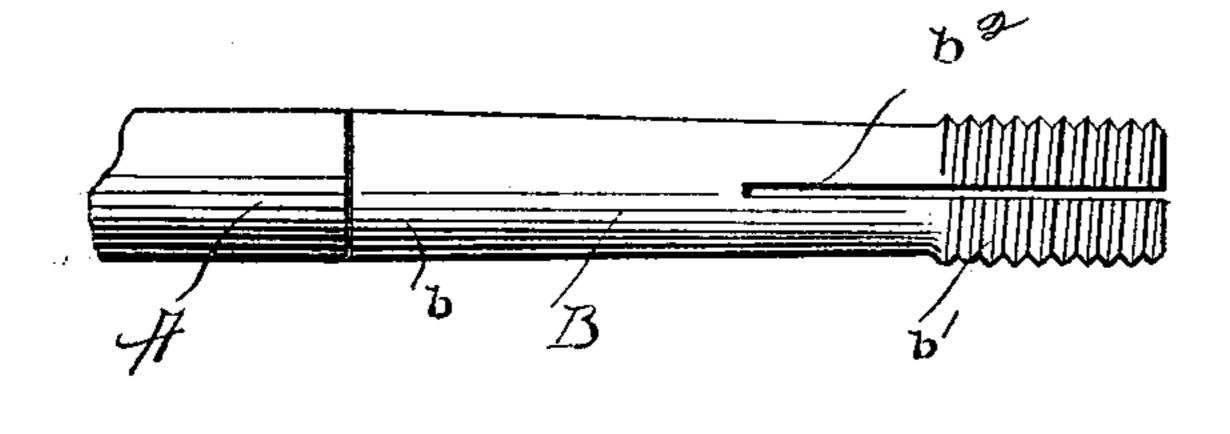
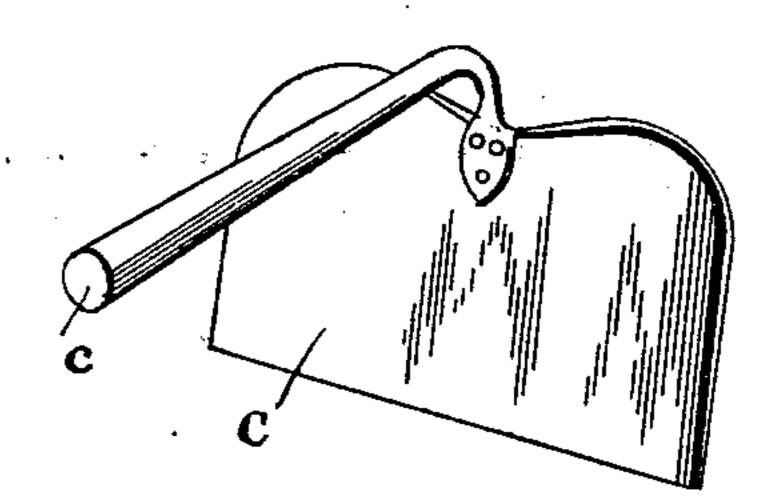
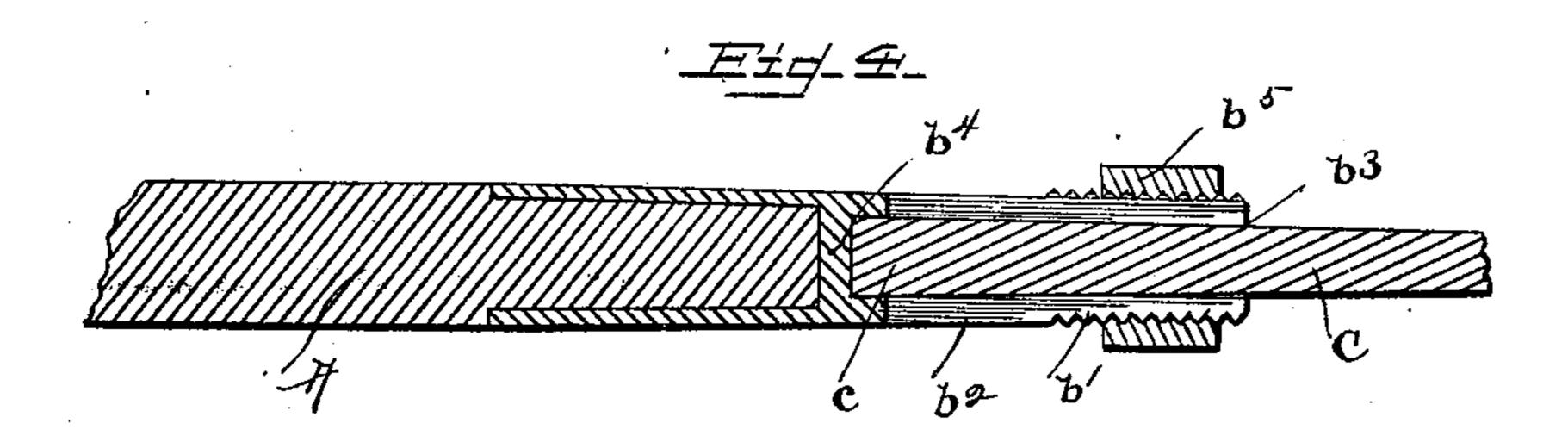


Fig-2\_

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WITNESSES

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## United States Patent Office.

ALBERT C. LANTZ, OF COTTONDALE, TEXAS.

## TOOL-HANDLE AND TOOL.

SPECIFICATION forming part of Letters Patent No. 631,427, dated August 22, 1899.

Application filed November 11, 1896. Serial No. 611,758. (No model.)

To all whom it may concern:

Be it known that I, Albert C. Lantz, a citizen of the United States, residing at Cottondale, in the county of Wise and State of Texas, have invented certain new and useful Improvements in Tool-Handles and Tools; and I do hereby 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.

My invention relates to an improvement in tool-handles and fastening therefor; and the object is to provide a construction so that several tools can be used in the same handle, the tool being detachable therefrom, but securely held in place when applied. To this end the invention consists in the details of construction as hereinafter described and colaimed.

In the accompanying drawings, which illustrate the invention, Figure 1 is a perspective of the complete invention, showing a hoe in position. Fig. 2 is a view of the ferrule of the handle with the nut and tool removed. Fig. 3 is a perspective of the tool. Fig. 4 is a sectional elevation of the ferrule, a portion of the handle, and the tool in the ferrule.

Referring now more particularly to the 30 drawings, A represents a handle of ordinary construction, and B the ferrule, applied, as usual, to the lower end of the handle. This ferrule is exteriorly tapering and split at one end, which end is adapted to receive and hold 35 the tool C. The shank c thereof flares outwardly in all directions radial to its axis. Manifestly the present construction can be applied to any character of tool and handle, but it is here shown as applied to a hoe. The 40 ferrule tapers, as at b, toward its lower end and has external threads b' upon this end. The threaded portion of the ferrule is provided with slits  $b^2$ , running in the direction of the length thereof, said slits extending to 45 any convenient point. The interior of the ferrule is provided with a normally cylindric opening  $b^3$ , which when drawn together by a nut enlarges from the end of the ferrule inwardly, a suitable stop or partition  $b^4$  being 50 provided at the end of this opening. A nut

 $b^5$  engages the threads upon the tapered end of the ferrule. Beyond this slightly-tapering split portion the ferrule continues in a hollow tubular portion and is provided in its body with a hole for the reception of a pin or 55 screw to fasten it securely to the handle. The lower end of the handle is placed in this portion and rests against the partition  $b^4$ , so that when pressure is exerted thereon it will not interfere with the tool.

The tool C has a shank c, which tapers inwardly, as shown, from its end, this shank being of a size adapted to fit in the opening in the end of the ferrule, and when inserted its end rests against the other side of the partition  $b^4$ . It will now be seen that when the shank is inserted in the opening in the ferrule end and as the nut is screwed up upon the inclined end of the ferrule said end is drawn and held tightly around the shank of 70 the tool. This incline tends to hold the tool firmly in place and prevents all forward movement of the same.

By the use of this device one handle can be employed for various tools—such as hoes, 75 rakes, pitchforks, &c.—and should the rake, hoe, or other implement become worn or broken a new one can be secured and inserted in the old handle, thus saving the expense of a separate handle with each new tool.

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

The combination with a tool and a shank outwardly flaring away from the tool in all 85 directions radial to its axis; of a handle, a ferrule thereon longitudinally split at its lower end, tapering and threaded exteriorly, and with its interior normally cylindric and of the size of the larger end of said shank, 90 and a nut of a size to engage the smaller end of said threads, all substantially as described.

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

ALBERT C. LANTZ.

Witnesses:
SAM. T. RHODES,
JOHN W. WOOD.