

*S. N. Haight,
Molasses Gate.*

No 55,286.

Patented June 5, 1866.

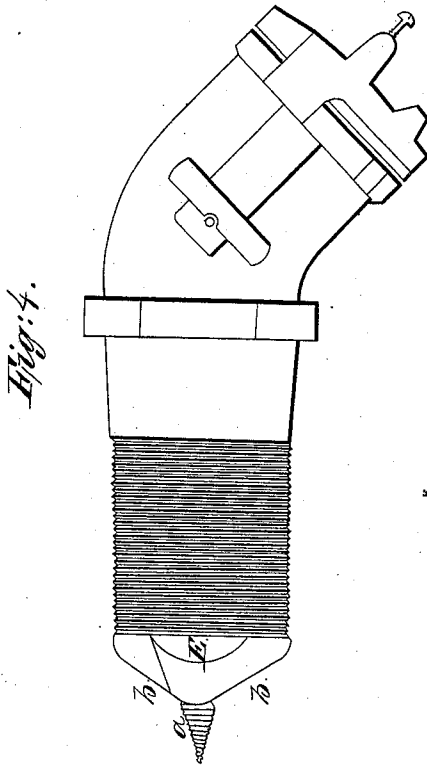


Fig: 1.

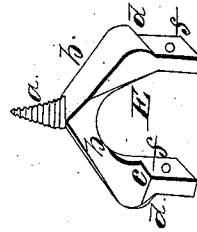


Fig: 2.

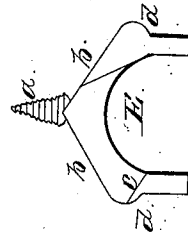


Fig: 3.



*Witnesses:
J. J. Banks
W. V. Harris*

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UNITED STATES PATENT OFFICE.

SAMUEL N. HAIGHT, OF BEDFORD STATION, NEW YORK.

IMPROVEMENT IN SELF-INSERTING FAUCETS.

Specification forming part of Letters Patent No. 55,286, dated June 5, 1866.

To all whom it may concern:

Be it known that I, SAML. N. HAIGHT, of Bedford, in the county of Westchester and State of New York, have invented a new and useful Improvement on the Bits or Boring Devices of Self-Inserting Faucets; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective. Fig. 2 is a side elevation. Fig. 3 is a transverse section, and Fig. 4 represents the bit attached to a molasses-gate.

a is the screw or penetrating-point; *b b*, the cutting-edges. *c* is a channel or groove to convey the chips cut at or near the perimeter into the barrel of the faucet. *d* is the point to which the bit sets into the faucet; *f*, holes for rivets or screws by which the bit is fastened to the faucet.

I usually construct my bits of steel. They are made in form similar to an arch with a screw or penetrating-point, *a*, which is like the screw used on the common auger.

Two cutting-edges, *b b*, extend on opposite sides or faces of the bit from the base of the screw *a* to the sides of the bit *d d*, and are sloped or inclined, so that in boring the parts near the screw are first after the screw to penetrate or cut through the head of the cask or whatever is pierced, and cut into small pieces the splinter that is frequently left uncut by the common auger or bit, and obstruct the free flow of the fluid into the faucet.

At the sides of the bit *d d* the cutting-edges are curved inward similar to Cook's patent auger, and begin the formation of the channel *c*, which channel or groove is extended across the outer part of the bit to the open space *E*.

I have no precise slope for the cutting-edges *b b*, but usually construct them at an angle of about twenty degrees.

The lower end of the bit sets into the faucet to the points *d d* in a groove or notch fitted in the faucet for it, and is fastened by rivets or screws passing through the sides of the faucet and the holes *f* in the bit.

The distance from the base of the screw *a* to the faucet does not exceed three-fourths of an inch—usually it is less—and the top of the open space *E* is never brought within or below the end of the faucet.

In the operation of boring the chips are directed into the barrel of the faucet and pass out by the same channel as the fluid. The fluid flows both sides of the bit into the faucet.

The advantages of this form of bit are, that it offers less obstruction to the flow of fluid and passage of chips into the faucets than others.

The channel *c* aids in conducting chips into the faucet, and its sloping cutting-edges leave no splinters within the cask that is pierced to obstruct the flow of the fluid.

I am aware that augers and bits have been and are in use with slanting cutting-edges, and also a little groove or return at the extremes of said edges, and I do not herein claim their invention; but

I do claim as my invention and desire to secure by Letters Patent—

The combination of the open space *E* with the sloping cutting-edges *b b* and the channel or groove *c* of the arched and detachable cutter, substantially as and for the purpose described.

SAML. N. HAIGHT.

Witnesses:

I. I. BANKS,
W. N. BANKS.