

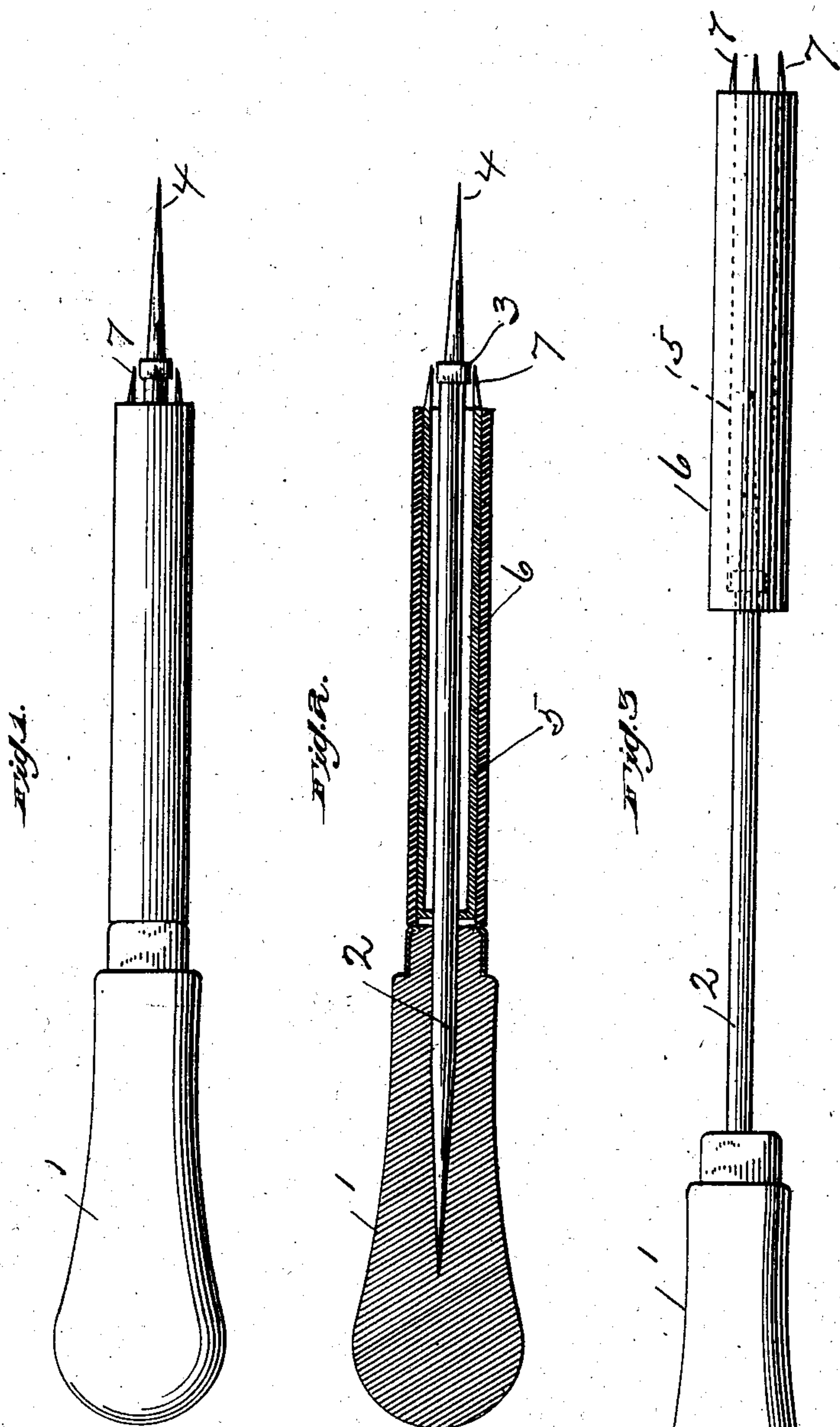
No. 721,326.

PATENTED FEB. 24, 1903.

R. W. REYNOLDS.
ICE BREAKER.

APPLICATION FILED NOV. 19, 1901.

NO MODEL.



Witnesses:
J. P. Hoffman
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Atty.

UNITED STATES PATENT OFFICE.

RICHARD W. REYNOLDS, OF KITTANNING, PENNSYLVANIA.

ICE-BREAKER.

SPECIFICATION forming part of Letters Patent No. 721,326, dated February 24, 1903.

Application filed November 19, 1901. Serial No. 82,847. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. REYNOLDS, a citizen of the United States of America, residing at Kittanning, in the county of Armstrong and State of Pennsylvania, have invented certain new and useful Improvements in Ice-Breakers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in ice-breakers, and has for its object the provision of novel means whereby small particles of ice may be chipped off from a block.

The invention has for its further object the provision of novel means whereby the ice-breaker may be easily retained in one position and the block of ice pierced until it is broken in the desired direction and to the proper thickness.

The invention further aims to construct an ice-breaker of the above-described class that will be extremely simple in construction, strong, durable, and comparatively inexpensive to manufacture.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a side elevation of my improved ice-breaker. Fig. 2 is a vertical sectional view thereof. Fig. 3 is a side elevation of my improved ice-breaker, showing the sleeve of the same in an extended position.

In the drawings the reference-numeral 1 indicates a suitable handle which has rigidly secured therein the rod 2, said rod carrying a collar 3 near its end and terminating into a point 4.

The reference-numeral 5 represents an inner casing inclosed by an outer grip-casing 6, said inner casing terminating in a series of points 7, extending outwardly from said in-

ner and outer casings. This inner and outer casing is slidably connected to the rod 2 and operates thereon, the movement of said casings being limited by means of the shoulder 3, carried by the said rod 2. The inner end of the sleeve 6 extends beyond the adjacent end of the inner sleeve 5, so as to cushion the handle 1 as it is brought downward.

The operation of my improved device is as follows: The sleeve is operated, the series of points 7 engaging the ice in a firm manner. The handle carrying the rod and point 4 is then operated to pierce the ice. It will be readily understood that in this manner ice may be easily broken in any desired manner, as it is an extremely difficult matter with the pick or other pointed instrument to operate the point a number of times on the same place upon the block of ice. It is the object of my invention to overcome these difficulties, and the many advantages obtained by the use of my device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

In a device of the character described, the combination with the handle, and a pointed rod rigidly secured in the said handle, said rod provided adjacent its pointed end with a collar, of a metallic sleeve loosely mounted on the said rod and having its forward end provided with a series of points, and an outer grip-sleeve secured to and inclosing the inner sleeve and having its rear end extending beyond the adjacent end of the inner sleeve and adapted to be engaged by the handle as the same is lowered, said annular collar being adapted to limit the inward movement of the said rod, substantially as described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

RICHARD W. REYNOLDS.

Witnesses:

HENRY MOHR,
WM. J. RICE.