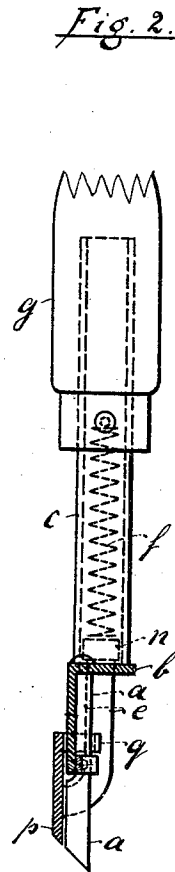
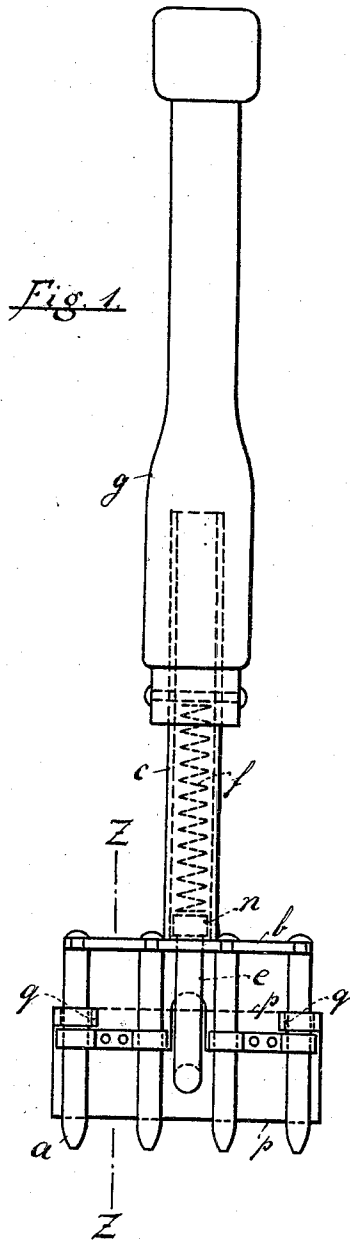


J. DEININGER.
ICE BREAKER.
APPLICATION FILED MAR. 1, 1911.

1,041,605.

Patented Oct. 15, 1912.



Witnesses:
C. D. Swett.
W. W. Edelin.

Inventor.
John Deiningor
by F. Dittmar
Attorney.

UNITED STATES PATENT OFFICE.

JOHN DEININGER, OF ULM, WURTTENBERG, GERMANY.

ICE-BREAKER.

1,041,605.

Specification of Letters Patent.

Patented Oct. 15, 1912.

Application filed March 1, 1911. Serial No. 611,591.

To all whom it may concern:

Be it known that I, JOHN DEININGER, a subject of the German Emperor, residing at Ulm a. D., Kingdom of Wurttemberg, in the Empire of Germany, have invented certain new and useful Improvements in Ice-Breakers, of which the following is a specification, reference being had therein to the accompanying drawing.

10 My invention relates to ice breakers or pounders, by which ice is easily and quickly broken into small pieces.

The invention is also well adapted for removing ice from sidewalks in the winter 15 time.

The invention consists in a plurality of pegs or pins, sharpened at their lower ends, arranged in a row, and secured to an angle iron, with a cleaning and crushing plate.

20 The various features of the device are fully illustrated in the accompanying drawing, in which—

Figure 1, is a front elevation of the device, and Fig. 2, is a vertical cross section, 25 on the line *z—z*, of Fig. 1.

In the following description the drawing is referred to by letters, similar characters denoting corresponding parts in the different views.

30 Referring to the drawing, the character *a* designates the pegs or pins, employed. These are preferably made of steel, sharpened at their lower ends and secured in a row on the angle iron *b*. The pegs are riveted to the horizontal flange of the angle iron, and secured to the vertical flange of the same, by clips or clamps. On the horizontal flange of the angle iron is also rigidly secured the tubular casing *c*.

40 The cleaning and crushing plate is arranged vertically and consists of the plate *p*, sharpened at its lower edge, the cutting edge of said plate being positioned close to, and parallel with the row of pegs.

The plate *p*, in connection with its spindle 45 *e*, is movable in the direction of the pegs, by means of the annular offsets, *q*, which embrace the outer pegs, and by the spindle head *n*, which is guided in the casing *c*, and which presses on the spring *f* in the casing. 50

The plate *p*, is always kept in its lowest position, so that whenever it is pushed upward, it returns to its former position, by the pressure of the resilient member. In the lowest position of the plate *p*, the upsets 55 *q*, rest on the clamps securing the pegs *a* to the vertical leg of the angle iron *b*.

The tubular casing *c* is secured to the handle *g*, whereby the ice breaker assumes the form of a pestle. 60

The working of this device is made sufficiently clear by the above description, without further explanation.

I do not limit myself to the exact construction shown in the drawings, for it is 65 evident that reasonable changes in the construction and dimensions of the device can be made, without departing from the spirit of the invention.

Having thus fully described the invention, 70 what I claim and desire to secure by Letters Patent of the United States is,—

An ice breaker comprising a row of pegs, an angle iron to which said pegs are secured, a vertical plate with sharpened lower 75 edge slidable along said pegs, a spindle on said plate, clips on said plate loosely embracing the vertical portion of said angle iron and the outer pegs, and a resilient member depressing said spindle and said plate, 80 as herein set forth.

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

JOHN DEININGER.

Witnesses:

WILHELM OTT,
EUGEN HEMMELL.