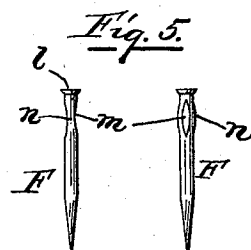
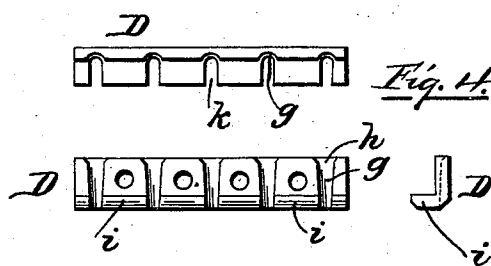
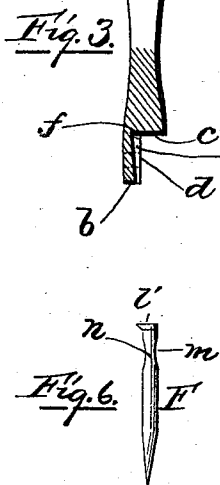
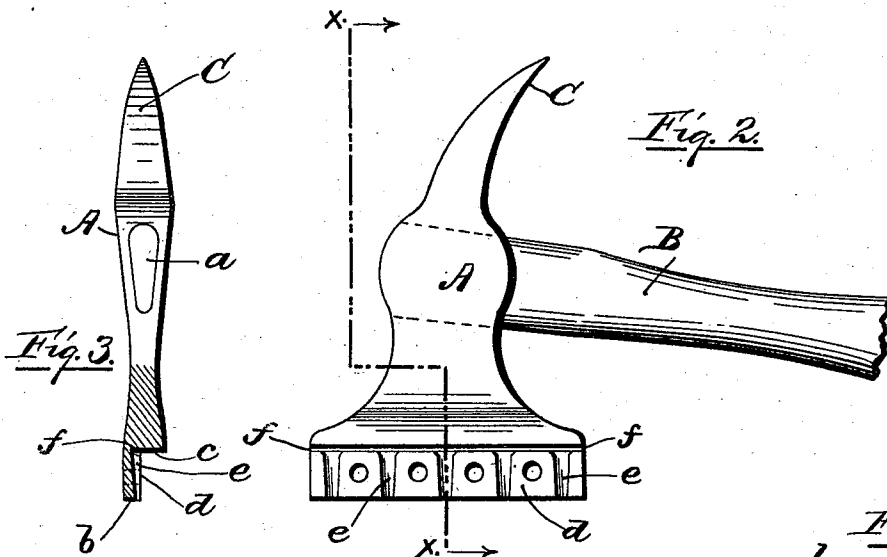
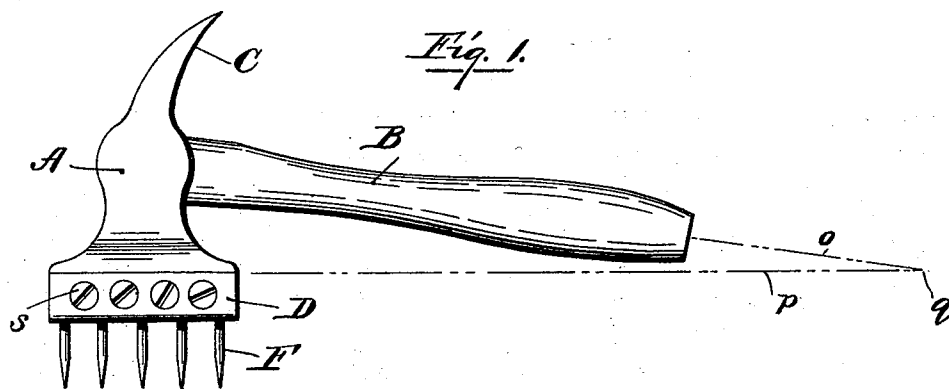


(No Model.)

C. R. DAY.
ICE SPLITTER.

No. 499,286.

Patented June 13, 1893.



Witnesses.

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UNITED STATES PATENT OFFICE.

CORNELIUS R. DAY, OF BLACKSTONE, MASSACHUSETTS.

ICE-SPLITTER.

SPECIFICATION forming part of Letters Patent No. 499,286, dated June 13, 1893.

Application filed February 4, 1893. Serial No. 460,945. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS R. DAY, of Blackstone, in the county of Worcester and State of Massachusetts, have invented a new and Improved Ice-Splitter, of which the following is a full, clear, and exact description.

The object of my invention is the construction of a tool for the quick and convenient handling and splitting of blocks of ice, and which is specially designed and adapted to use, in delivering ice from the cart to consumers, in that it enables the driver to more quickly handle, split and shape the block of ice to the required size and shape, and without the waste incident to the use of the ordinary hatchet or pick in common use, and consists in certain details of construction and arrangement, and combination of parts, hereinafter described.

The accompanying drawings illustrate my invention.

Figure 1. is a side elevation showing the splitter complete. Fig. 2. is a partial side view of the same enlarged, with lower side plate removed to show recess for the picks. Fig. 3. is a section on line *x. x.*, of Fig. 2. Fig. 4. is a detailed view of the lower side plate. Fig. 5. is a detailed view of the picks. Fig. 6 is a modification of the picks, showing flange of head on one side only.

Like letters indicate corresponding parts throughout the several views.

A is the splitter head, of cast steel or other suitable metal, having an eye *a* for the insertion of the handle B, its upper part forming a curved hook C. terminating in a sharp point, designed for drawing the block of ice toward the user, preparatory to splitting it into the desired shape and size. The blade *b*, or lower part of the head, is constructed with a recess in one side, along the whole length of the blade *b*, the recess being rectangular in form, and having a depth equal to about two thirds the thickness of the blade, and a breadth sufficient to furnish a strong basis for the reception of the picks, hereinafter described, the upper face *c* and lower face *d* of the recess lying in planes at right angles to one another. In face *d* there are formed shallow grooves *e*, extending from the lower edge of the blade to the upper face *c*.

The grooves are slightly broadened, as they extend upward, to accommodate and closely fit the broadened shanks of the picks hereinafter described, which they are intended to receive. A narrow groove *f*, is also formed in face *d* along its upper edge, for the reception of the flange of the heads of the picks.

D. is a plate of the same metal as the head, of the requisite length and breadth to correspond with the shape of the recess, and having in its under surface, shallow grooves *g*, corresponding in form with grooves *e* in face *d*, and adapted to partially, and closely, embrace the shanks of the picks, when the plate is fastened to the blade. The upper ends *h* of grooves *g* are slightly enlarged to accommodate the flanges of the heads of the picks. Plate D. is also provided with a flange *i* upon its lower edge, formed at right angles to the face of the plate, and having therein slots *k* adapted to fit around and closely embrace the body of the picks, when they are fastened in the grooves *e* and *g* between face *d* of the recess and plate D, thus supporting and strengthening the picks. Plate D. is fitted to the blade, the grooves *g* fitting over and closely embracing the shanks of the picks, and is fastened thereto by screws *s*, the heads of which are countersunk in the plate, the outer surface of which forms an even surface, continuous with that of the splitter head. The picks F. are made of tempered steel wire, and are of equal length, the body being cylindrical in form, and as small in cross-section as is consistent with strength. I believe picks of about three sixteenths of an inch diameter in cross-section, to be the best adapted in size for the use intended but other sizes may be used if desired. The smaller the picks are, the better, provided they are sufficiently strong for the work, because they make less waste. One end of the pick is ground conically to a sharp point, and upon the other is formed a flanged head *l*. The shanks of the picks are slightly flattened on two opposite sides or surfaces *m*, and correspondingly enlarged upon the other two opposite sides or surfaces *n*. When the picks are placed in the blade, the shanks rest with their flattened surfaces in the grooves *e* and *g*. The form of the shank is thus adapted to closely fit the corre-

spondingly shaped grooves *e* and *g*, the flange of the head fitting into groove *f* and the enlarged end *h* of groove *g*. When plate D. is securely fastened to the blade, the picks F. are held firmly in position between plate D. and face *d*, their heads resting firmly up against face *c*. The flanges of the heads of the picks, fitting into groove *f*, and the enlarged end *h* of groove *g*, together with the enlarged shank closely fitting into grooves *e* and *g*, both serve to prevent the picks from being drawn out of the blade. The enlargement of the shank also prevents the pick from turning around, or becoming loosened in any way in the grooves.

The picks may be readily removed and replaced by others in case of breakage, by first removing the plate.

If desired, picks may be used having the flanged head and without the enlarged shank, or they may be used having the enlarged shank and without the flanged head. The use of both features is not essential to a beneficial use of the pick, as the employment of one alone will prevent the picks from being drawn out, but the use of the pick having both features is desirable because it is thus held more solidly and securely in the blade.

Picks having the flange upon one side only of the head, as shown in Fig. 6, may be used, in which case the flange *l'* will fit into groove *f*, and the enlargement *h* of groove *g* may be omitted, or if desired, the flange *l'* may be fitted into the enlargement *h* of groove *g*, and groove *f* be omitted. In either case, the flange will effectually prevent the pick from being drawn out. I prefer, however, to have the head flanged all around, as shown in Fig. 5, as that form holds the pick in position most securely. The several picks are thus arranged in the blade in a line, standing vertically in the same plane with the handle.

B. is an ordinary hatchet handle of the usual length. The handle B, the upper face *c* of the recess, and the picks F. are constructed and arranged in the splitter head relatively to one another, so that the line *o* of the handle produced, and the plane of the heads of the picks F. extended in the direction of line *p* will converge upon and intersect one another near the end of the handle as shown at *q*; the result and advantage of which construction and relative arrangement of parts are, that in the use of the tool upon blocks of ice in the cart by the driver, standing upon the ground at the rear in the usual way, the blocks of ice being about upon a level with the hand of the user at the termination of its downward movement in the act of splitting, the points of the picks will all strike the block of ice at, or nearly at, right angles to its surface, and will enter the ice at, or nearly at, the same instant, thereby easily splitting the

same with little or no breaking or wasting of the ice.

I claim—

1. In an ice splitter the head A having in one side of the blade a rectangular recess formed by faces *c* and *d*, the lower face *d* having therein grooves *e* and *f*, in combination with plate D. having therein slots *k* and grooves *g* with enlargement *h*, and removable picks F formed with flanged heads *l* and flattened and enlarged shanks, substantially as described.

2. In an ice splitter the head A having in one side of the blade a rectangular recess formed by faces *c* and *d*, the lower face *d* having therein grooves *e* and *f*, in combination with plate D. having therein slots *k* and grooves *g*, and removable picks F formed with flanged head *l'* having flange on one side thereof, substantially as described.

3. In an ice splitter, the head A having in one side of the blade a rectangular recess formed by faces *c* and *d*, the lower face *d* having therein grooves *e*, in combination with plate D, having therein slots *k* and grooves *g* with enlargement *h*, and removable picks F, formed with flanged head *l'* having flange on one side thereof, substantially as described.

4. In an ice splitter the head A having in one side of the blade a rectangular recess formed by faces *c* and *d*, the lower face *d* having therein grooves *e* and *f*, in combination with plate D. having therein slots *k* and grooves *g* with enlargement *h*, and removable picks F, formed with flanged head *l*, substantially as described.

5. In an ice splitter the head A having in one side of the blade a rectangular recess formed by faces *c* and *d*, the lower face *d* having therein grooves *e*, in combination with plate D. having therein slots *k* and grooves *g*, and removable picks F. formed with flattened and enlarged shanks, substantially as described.

6. In an ice splitter the head A provided with eye *a* in combination with handle B. and a series of removable picks arranged in a straight line in the blade of the head and standing vertically in the same plane as the handle and at an angle of about eighty five degrees with the line of the handle substantially as described.

7. In an ice splitter the head A provided with eye *a* and handle B. in combination with a series of picks standing vertically in the blade in a straight line in the same plane as the handle and making an angle of about eighty five degrees with the line of the handle substantially as described.

CORNELIUS R. DAY.

Witnesses:

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FRANK J. PRUE.