

(No Model.)

H. C. CHESTER.

GRAPNEL.

No. 295,352.

Patented Mar. 18, 1884.

Fig. 1.

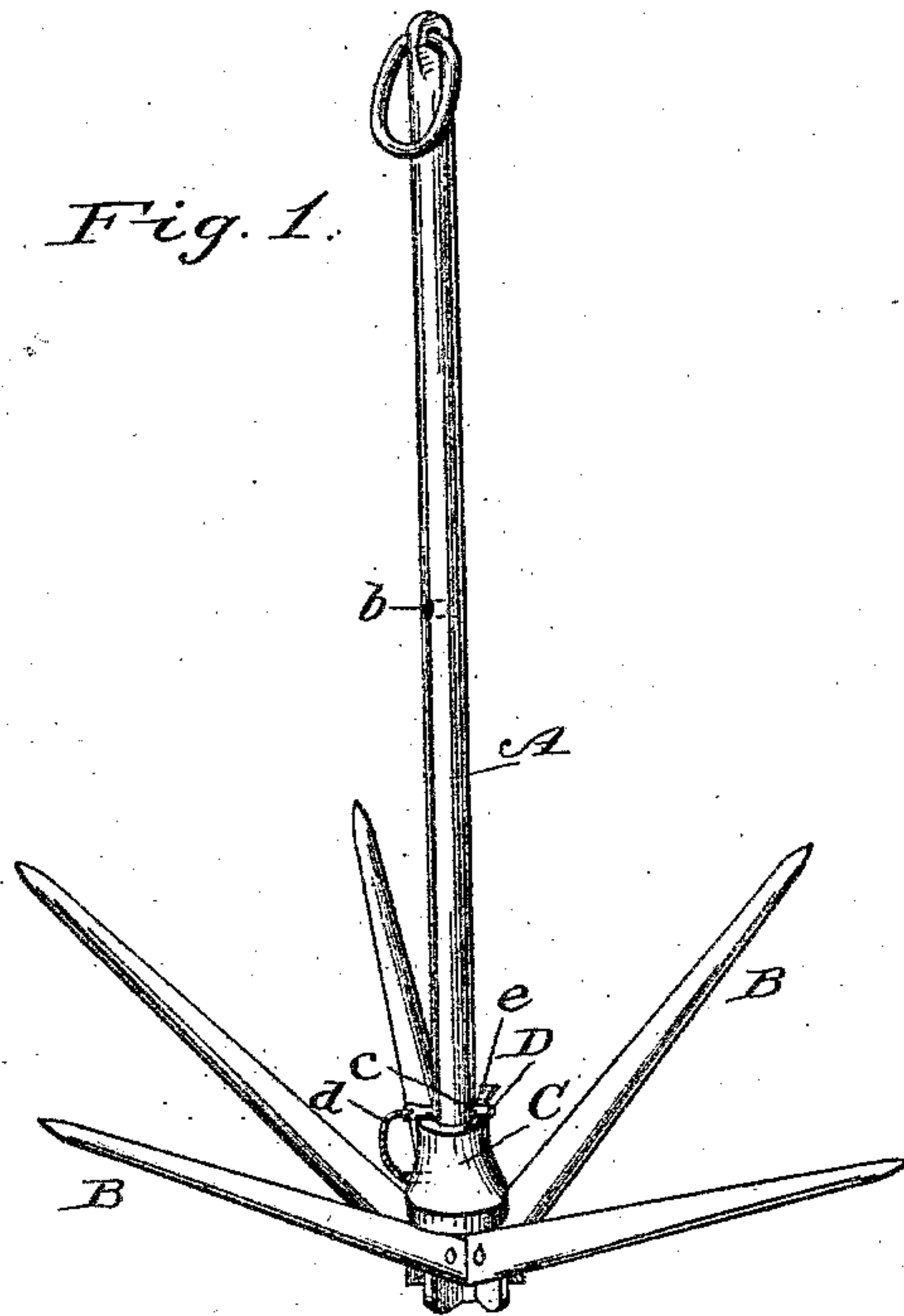
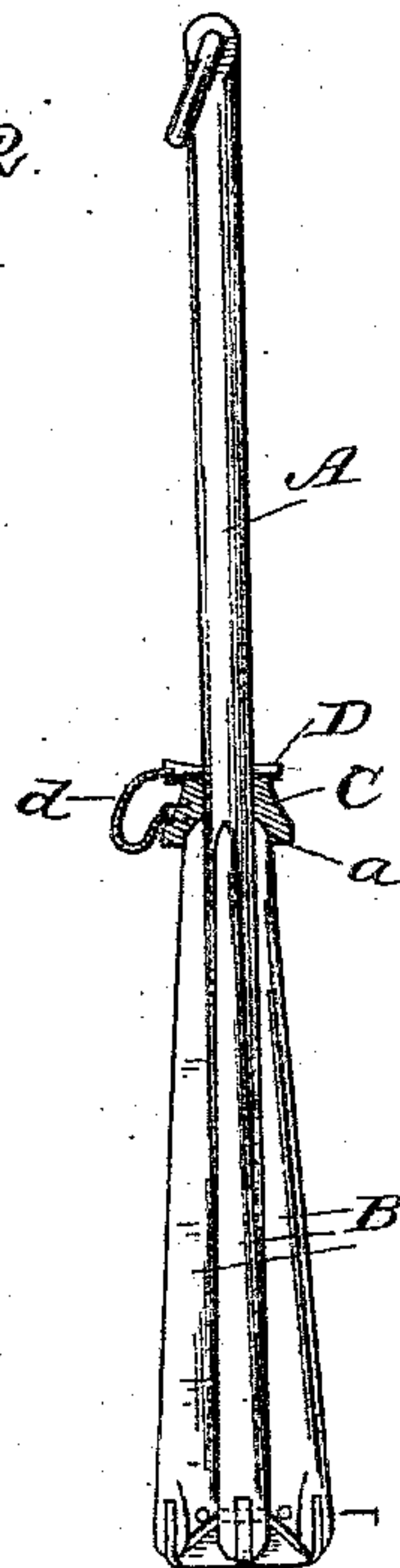


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

HUBBARD C. CHESTER, OF NOANK, CONNECTICUT.

GRAPNEL.

SPECIFICATION forming part of Letters Patent No. 295,352, dated March 18, 1884.

Application filed February 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, HUBBARD C. CHESTER, of Noank, in the county of New London and State of Connecticut, have invented a certain
5 new and useful Improvement in Grapnels, of which the following is a specification.

My improvement is intended to permit a grapnel to be folded up into small compass when not required for use. To this end I hinge
10 all the arms or flukes to the shank. I mount on the shank a slide which will embrace or receive the tips of the folded arms and will rest on the unfolded arms, and I provide a locking-pin or its equivalent for locking the slide in
15 either position, so that the latter shall serve to securely maintain the arms either folded or unfolded, as desired.

In the accompanying drawings I have represented a grapnel embodying my improve-
20 ment.

Figure 1 is a view of the grapnel unfolded. Fig. 2 is a view of it folded, with the slide in section.

A is the shank, to ears on the lower end of
25 which the arms or flukes B are hinged. The hinged ends of the arms are slanted or beveled, forming shoulders, which, by bringing up against the shank, determine the extent of spread of the unfolded arms. Upon the shank
30 is a slide, C, whose lower end is cupped or recessed, as shown at *a*, Fig. 2, to receive the points of the arms B, and thus hold them in folded position. At a point in the shank A, just above the top of the slide when in its up-
35 per position, is a hole, *b*, for the passage of a locking-pin, D, which locks the slide down in place over the points or tips of the folded

arms, which are thus securely held. When it is desired to unfold the grapnel, the pin is removed, the slide is raised to clear the arms, 40 and the latter unfold and spread apart, dropping to the position indicated in Fig. 1. The slide moves down on the shank until it brings up against the unfolded arm, and at a point in the shank just above the top of the slide 45 when in this position is a second hole, *c*, through which the locking-pin D is inserted, so as to hold the slide down upon the arms, which are consequently held securely in their unfolded position. The pin can be connected 50 to the slide by a chain, *d*, as indicated, and it can also have in its smaller end a slot or hole (like that in a linchpin) for the passage of a tongue or thong, *e*, of leather or other suitable material, to prevent the accidental displace- 55 ment of the pin.

Having described my improvement and the best way known to me of carrying the same into effect, what I claim, and desire to secure by Letters Patent, is— 60

The combination, with the shank and hinged and folding arms or flukes, of the recessed or cupped slide adapted to receive the points of the folded arms and to rest upon the unfolded or spread apart arms, and the locking device 65 whereby the slide is held in either of its two positions, substantially as hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 12th day of February, A. D. 1884. 70
HUBBARD C. CHESTER.

Witnesses:

EWELL A. DICK,
J. WALTER BLANDFORD.