

# H. J. England. Dirt-Scraper

N<sup>o</sup> 76179

Patented Mar. 31, 1868.

Fig. 1.

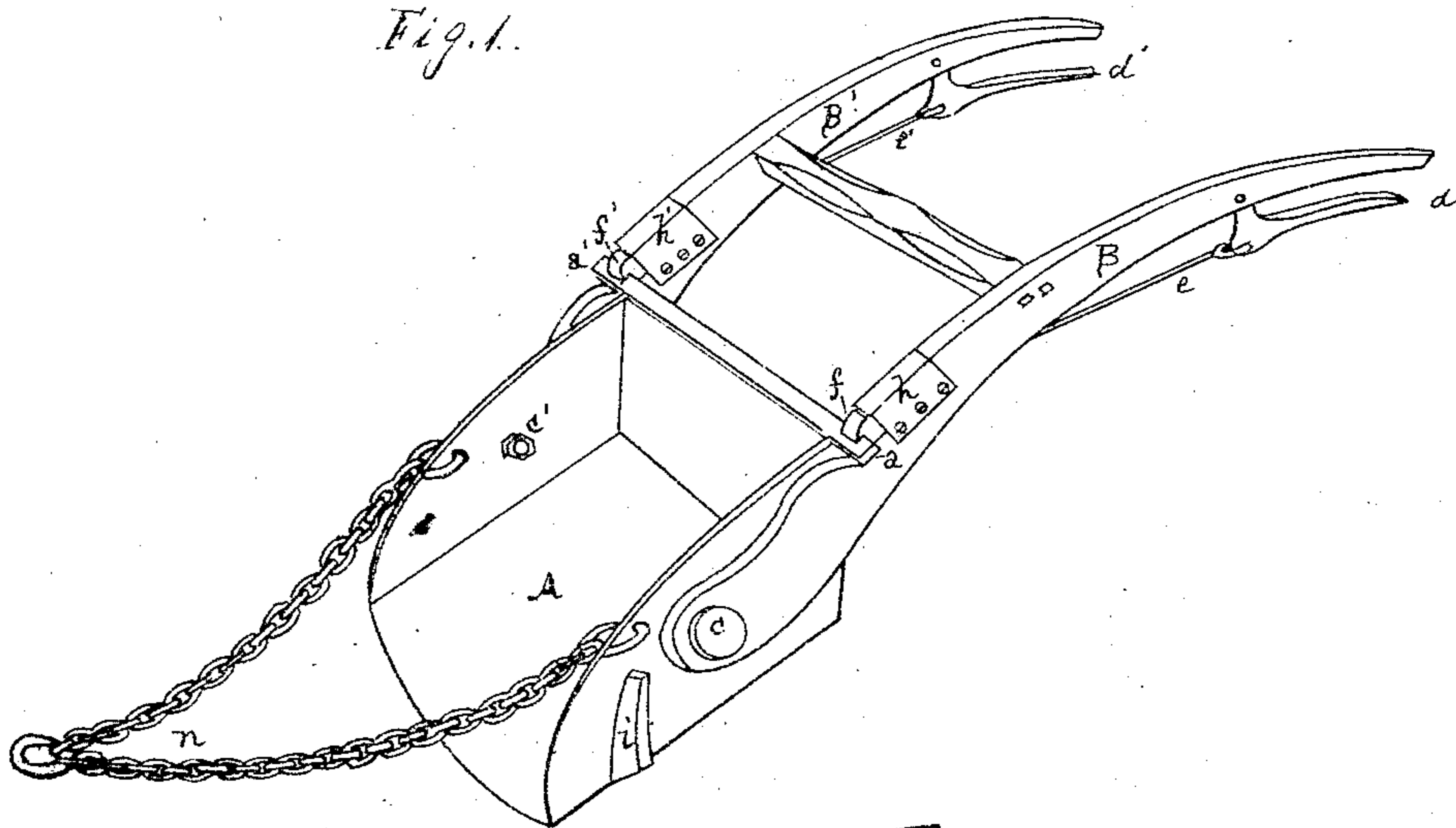


Fig. 2.

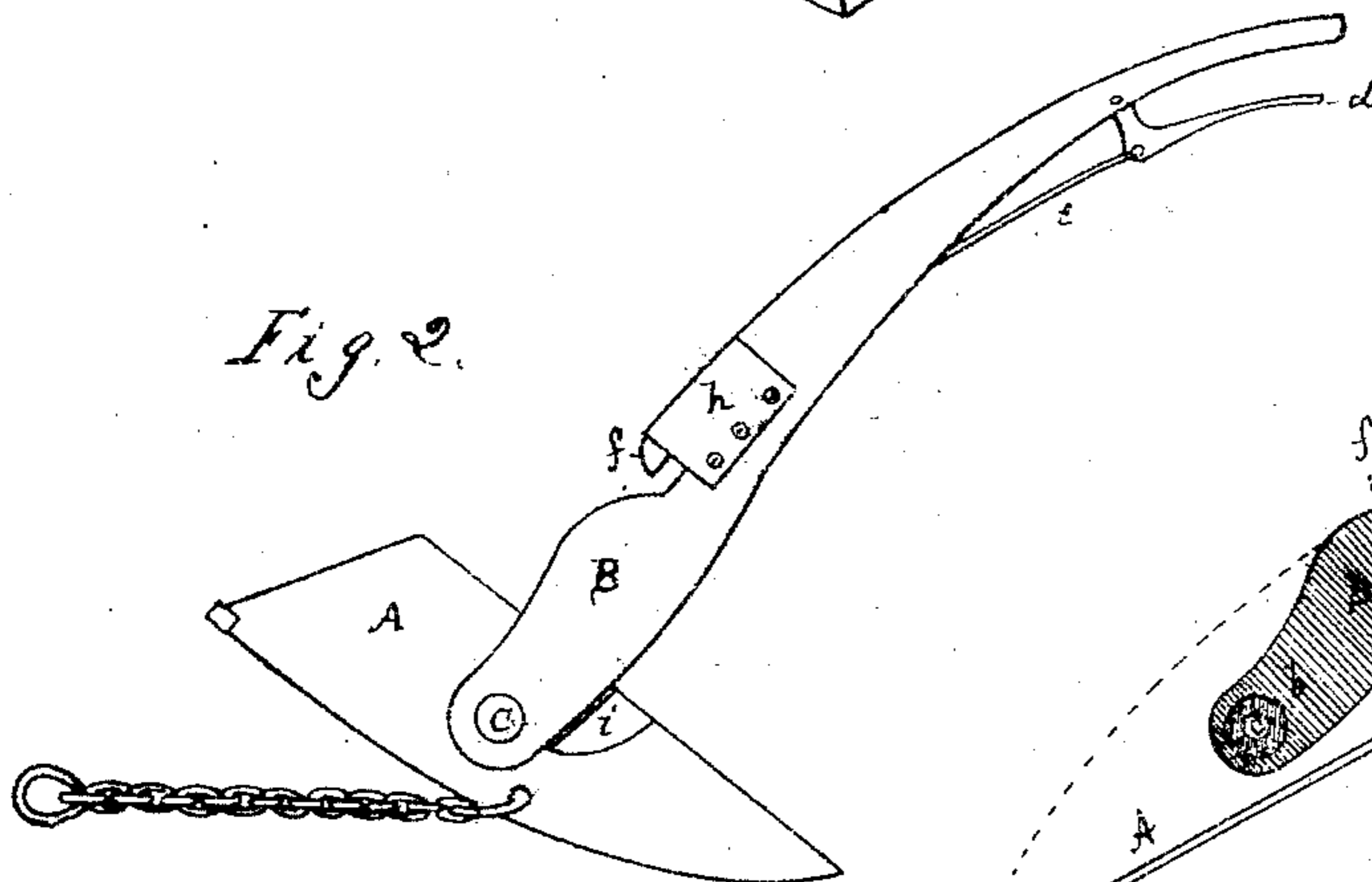


Fig. 3.

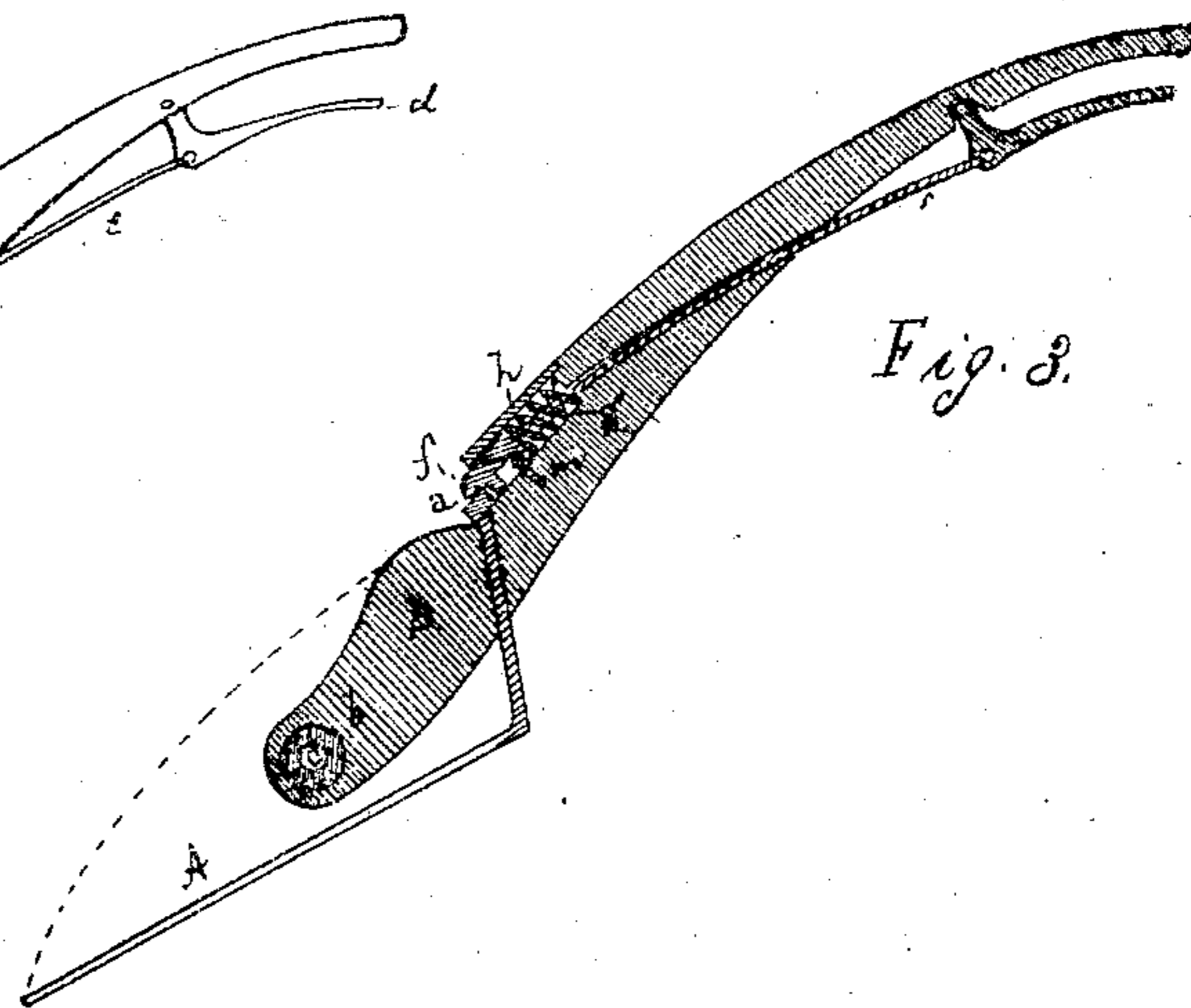
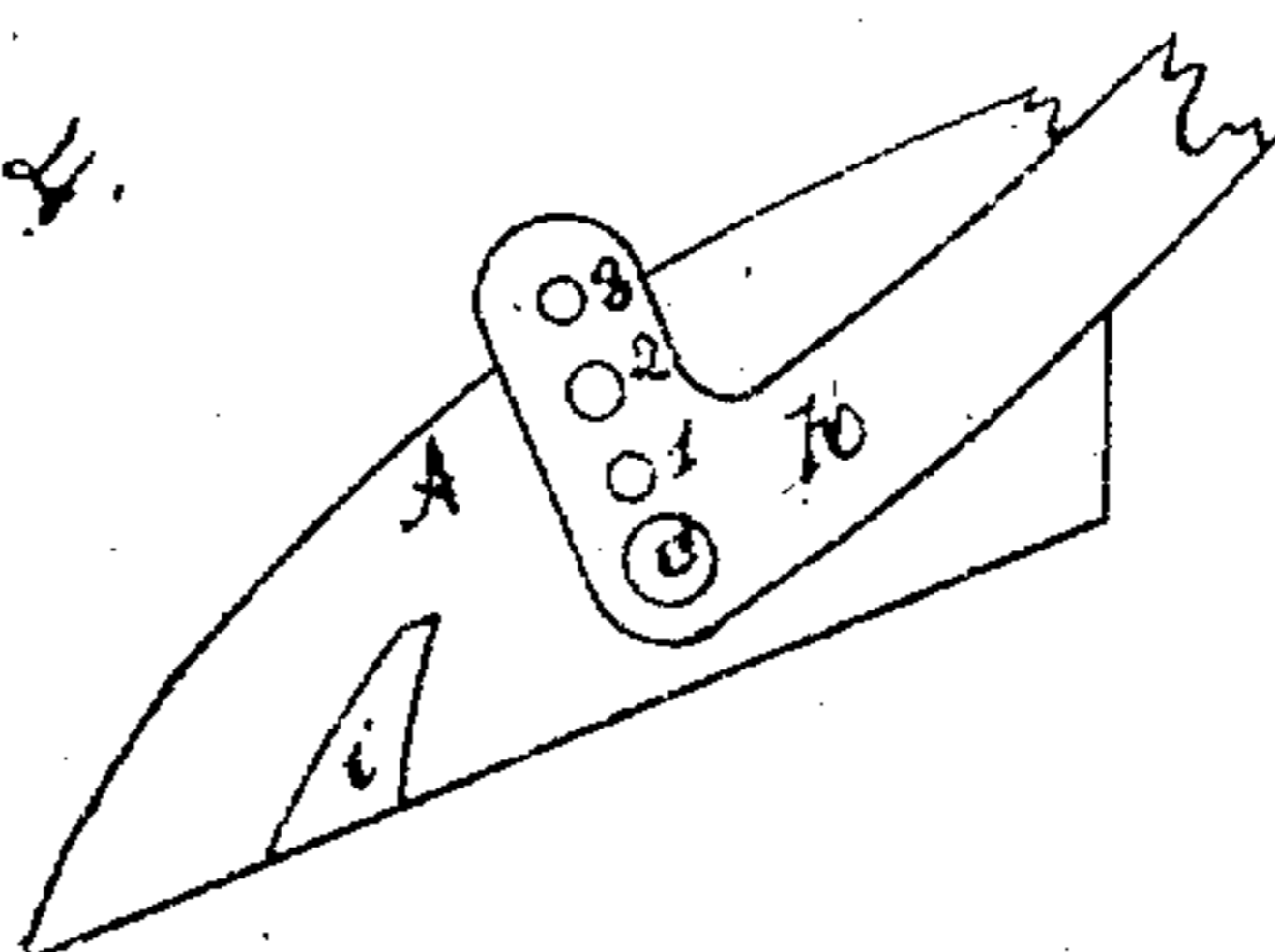


Fig. 4.



WITNESSES

William P. Lynch  
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HENRY J. ENGLAND, OF DELHI, NEW YORK.

Letters Patent No. 76,179, dated March 31, 1868.

## IMPROVED DIRT-SCRAPER.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY J. ENGLAND, of Delhi, in the county of Delaware, and State of New York, have invented a new and useful Improvement in Road or Dirt-Scrapers, of that class usually known as shovel dirt-scrappers; and I do hereby declare the following to be a clear and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view of my improved road-scraper.

Figure 2 is a side view of the same.

Figure 3 is a longitudinal section of the same.

Figure 4 is a sketch, showing how the angle of the shovel may be altered by means of the part *k*.

Like letters of reference indicate like parts.

The nature of my invention consists in forming a shovel road or dirt-scraper with the body *A* and handles *B B'* connected by hinge-bolts *c c'*, in such a manner as to allow of the body *A* being tipped over, so as to discharge its contents, as shown in fig. 2. The body *A* is formed of cast iron, in the same manner as ordinary dirt-scrappers, but is furnished with two projecting pieces *a a'*, fig. 1, the use of which is to act as a hold for the bolts or catches *f f'* to retain the body of the scraper firmly in the handles while in use scraping. It is also provided with two bosses, through which the hinge-bolts *c c'* pass, and on which the lower ends of the handles work, as shown at *b*, fig. 3. It is also furnished with two projecting pieces, as shown at *i*, figs. 1 and 2, the use of which is to act as a stop by striking on the handles, when the scraper is tipped over, to empty its contents, as shown in fig. 2. The handles *B B'*, fig. 1, are made of wood, or iron, as may be desired. They are attached to the body of the scraper, at their lower extremities, by the hinge-bolts *c c'*. At the upper or handle-end they are provided with two levers, *d d'*, fig. 1, the use of which is to draw back the catch-bolts *f f'* by means of the rods *e e'*, as shown more clearly in the sectional sketch, fig. 3. The catch-bolts *f f'* are intended to hold the body of the scraper securely in its proper position in the handles while scraping, as shown in fig. 1. They are pushed out by the spiral springs *g g'*, fig. 3, and are prevented from going too far out by the pin *m*, which works in a slot in the under side of the bolt. The rods *e e'* connect the catches *f f'* with the levers *d d'*, through the operation of which the catches are drawn back when it is desired to release the body of the scraper to empty its contents. The catches *f f'* and springs *g g'* are covered by the pieces *h h'*, fig. 1, which protects them from dirt, &c. The angle which the handles make with the body of the scraper may be varied at pleasure, by forming the lower ends of the handles in the manner shown at *k*, fig. 4, and using either of the holes 1, 2, or 3, as may be desired, through which to pass the hinge-bolt *c*. The chain *n* may be attached either above or below the hinge-bolts in the sides of the scraper. If attached above, the scraper will tip over with more ease; if below, the scraper will be drawn back into the handles more readily.

The method of operating the above improved scraper is as follows: The team is attached to the scraper through the medium of the chain *n*, (the scraper being locked as in fig. 1.) The man then takes hold of the handles at their upper end, the same as he would the handles of a plough, and inserting the end of the scraper-body in the ground or dirt to be removed, causes the team to move forward. When the body of the scraper is filled with the earth, or other matter to be removed, it is allowed to slide forward upon its under side until it arrives at the place where the contents are to be deposited, when the ends of the levers *d d'* are pressed up by the hands of the man holding them, which releases the body of the scraper, which tips over and empties its contents.

The advantages derived from the construction of the scraper according to my improved method are obvious. The handles of common shovel dirt-scrappers, as now constructed, being fast to the body of the scraper, and turning over with it, can only be used very short on account of the danger to be apprehended should the handles strike the legs of the horses or oxen employed, when the scraper is turned over to empty its contents. This shortness of the handles gives but little power over the scraper, and makes it very hard work for the person holding it, as it necessitates working in a stooping position, and makes it necessary for another person to drive the team; while, with my improved scraper, the handles may be made of any length to suit the height of the individual using it, who can walk erect in the same manner as if he were ploughing. This increase in the length of the handles

gives also more power over the scraper; and enables one person to drive the team and scrape at the same time. The ends of the handles are also kept free from dirt, as they are never tipped over with the body of the scraper.

What I claim as new in my invention, and desire to secure by Letters Patent, is—

1. The levers *d d'*, rods *e e'*, springs *g g'*, and catches *f f'*, in combination with a shovel dirt-scraper, when constructed in the manner and for the purposes set forth.

2. The projecting pieces *a a'* and *i i'*, in combination with a shovel dirt-scraper, when constructed in the manner and for the purposes set forth.

H. J. ENGLAND.

Witnesses:

WILLIAM P. LYNCH,

DEXTER PETTENGILL.