

(No Model.)

R. O. BINGHAM.

SCRAPER.

No. 248,988.

Patented Nov. 1, 1881.

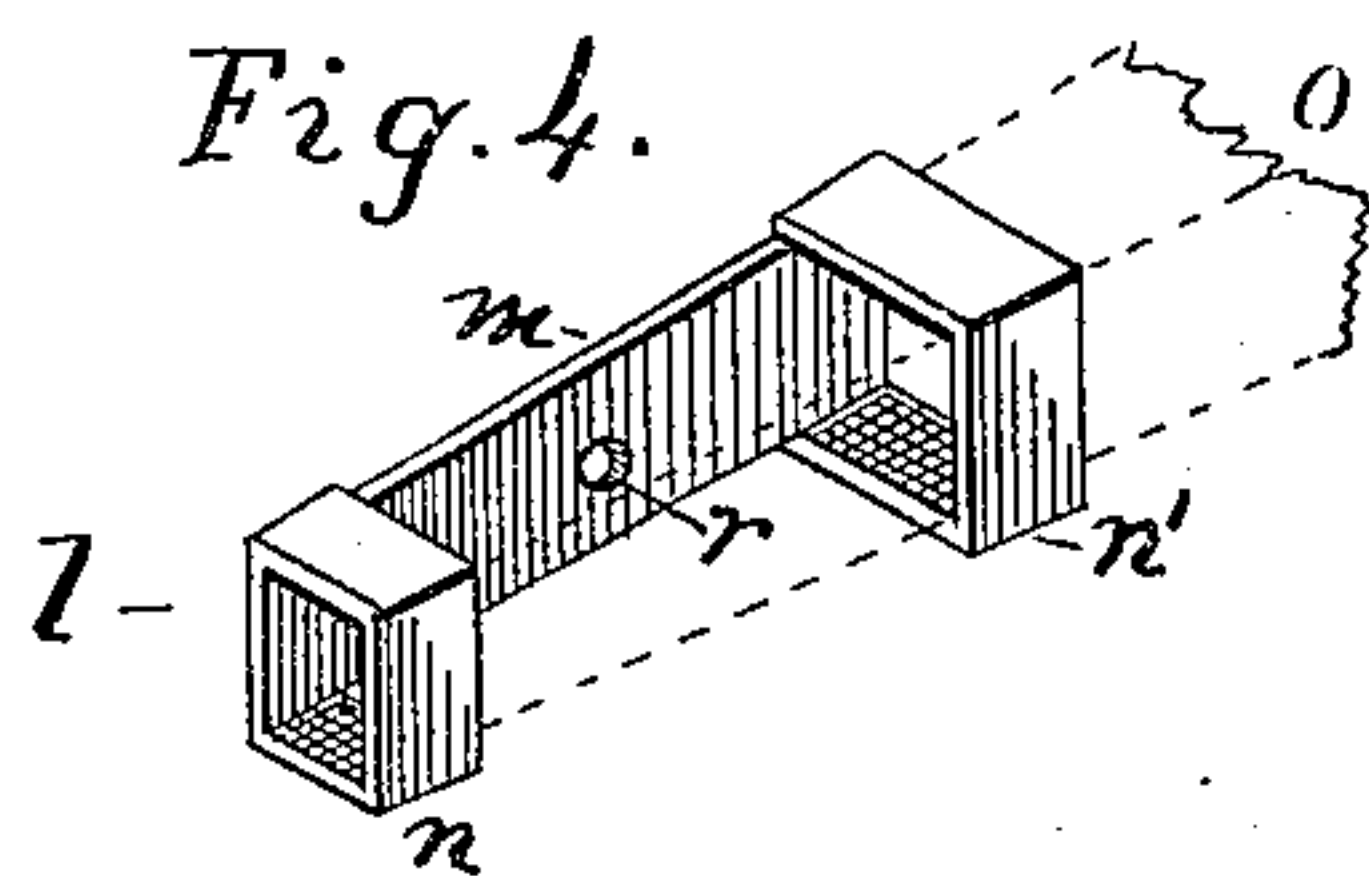
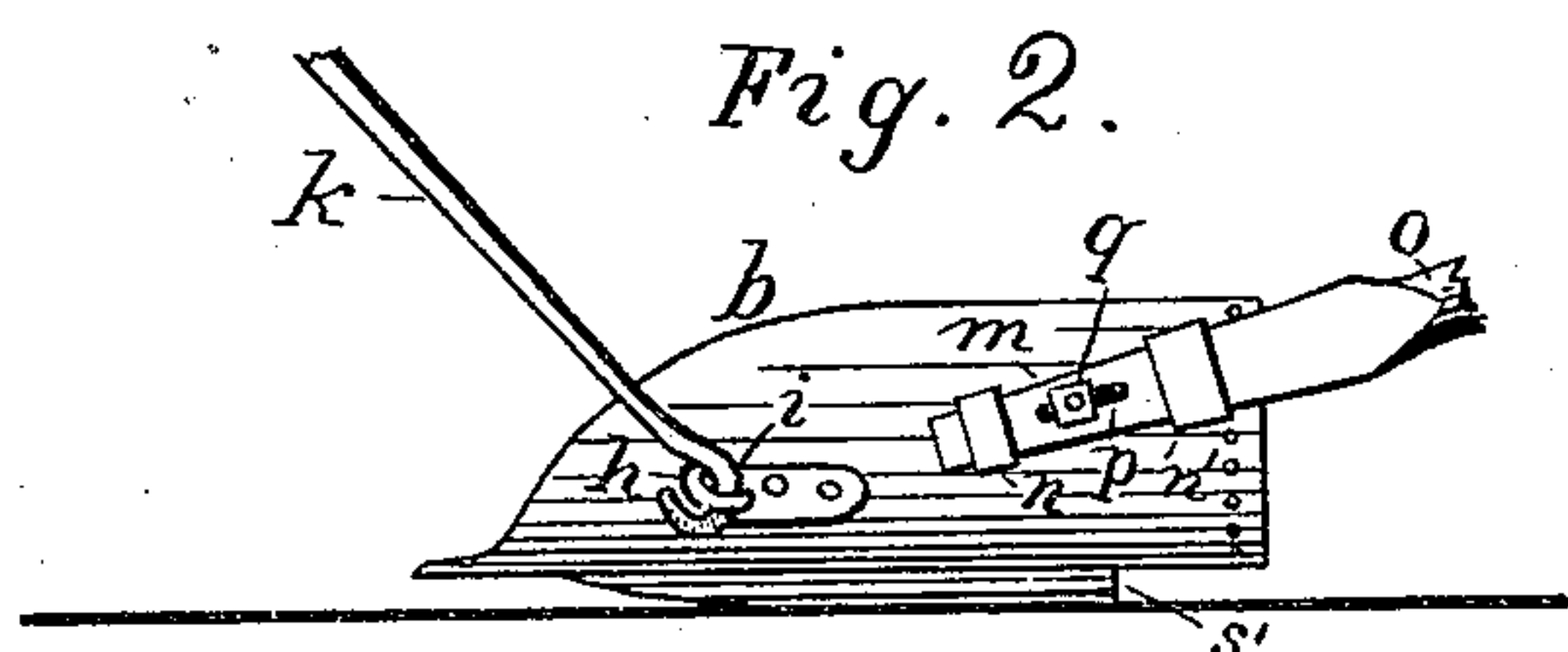
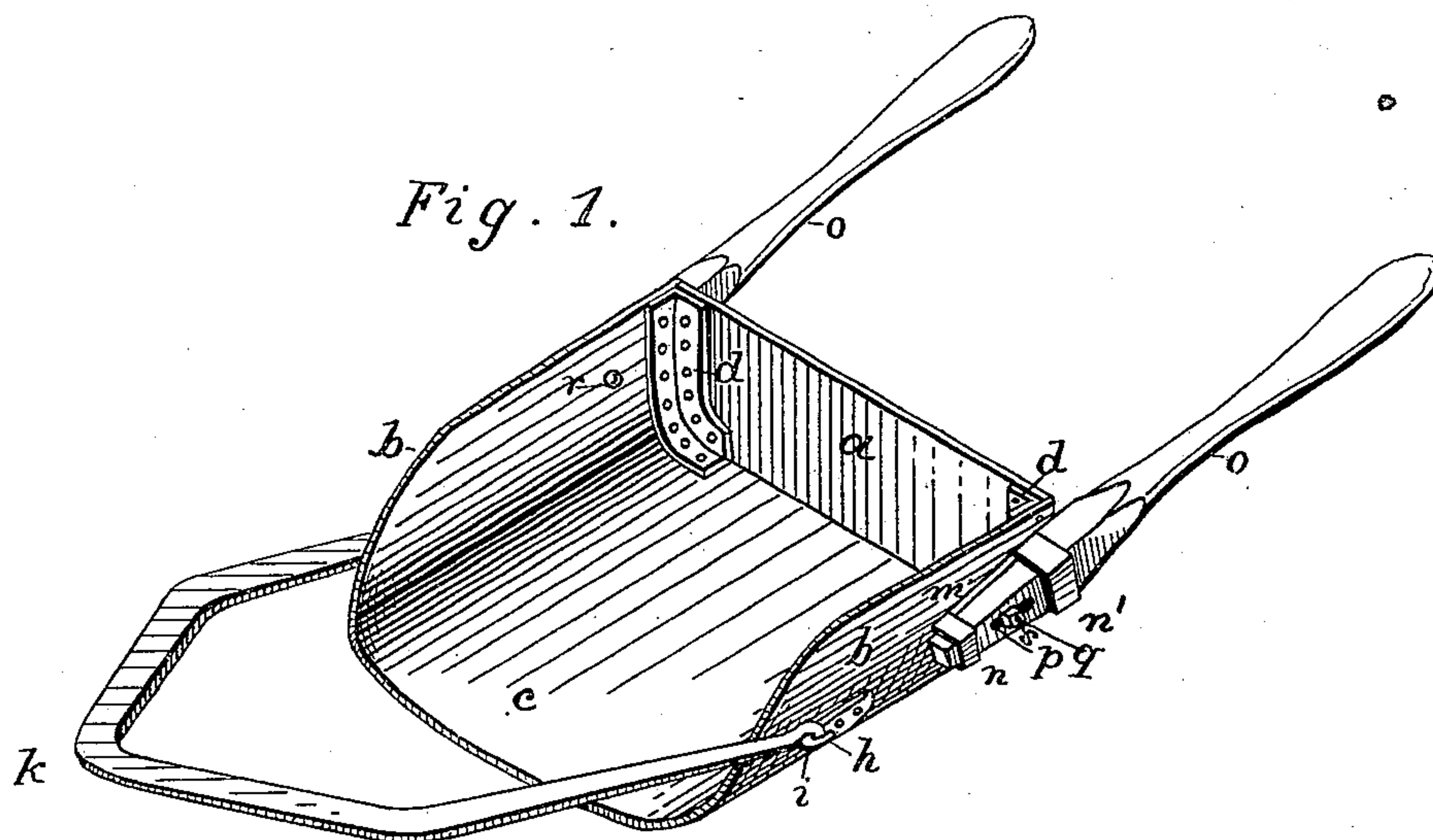
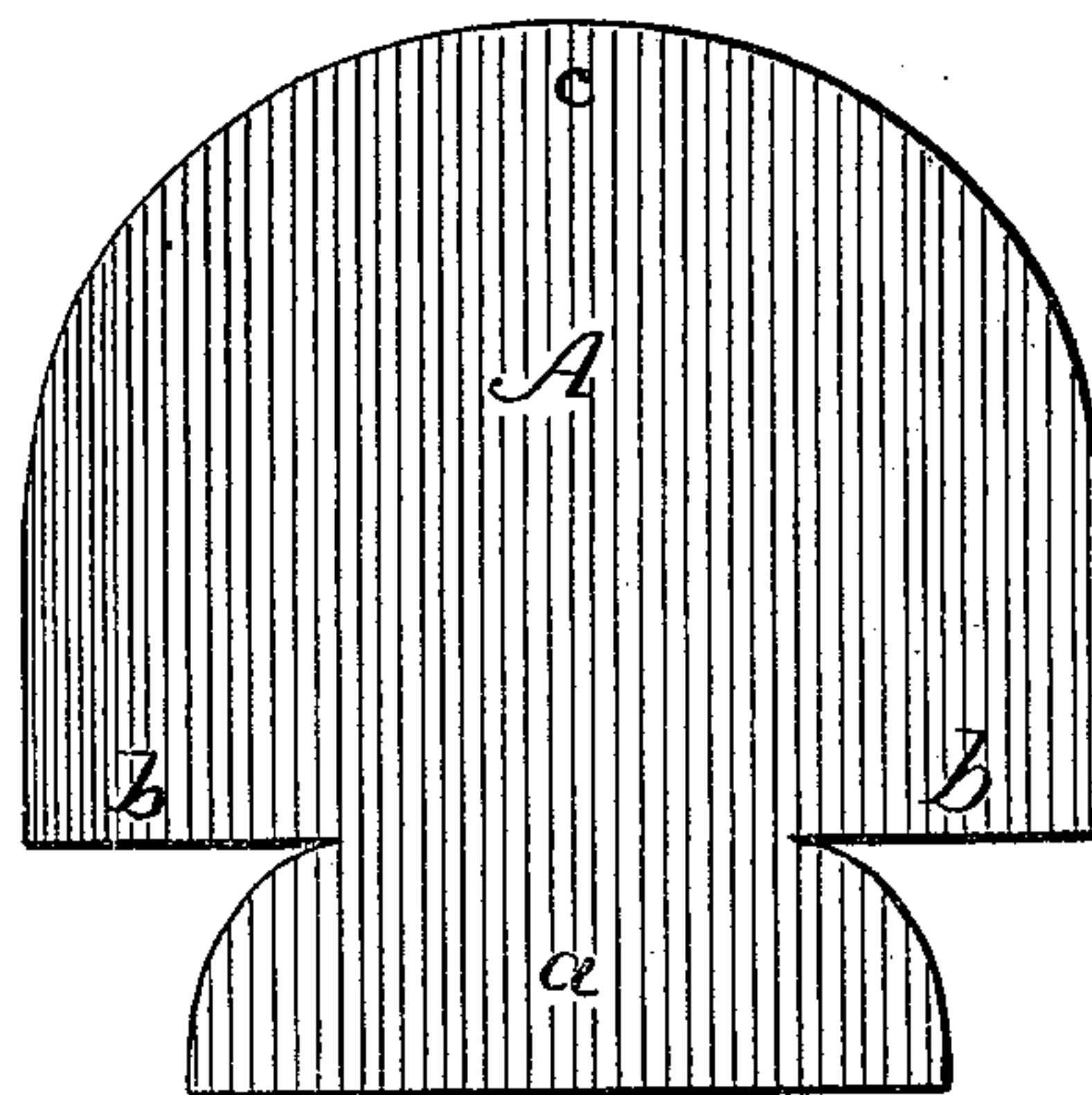


Fig. 3.



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UNITED STATES PATENT OFFICE.

ROBERT O. BINGHAM, OF SIDNEY, OHIO.

SCRAPER.

SPECIFICATION forming part of Letters Patent No. 248,988, dated November 1, 1881.

Application filed August 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, ROBERT OLIVER BINGHAM, of Sidney, in the county of Shelby and State of Ohio, have invented a new and useful Improvement in Earth-Scrapers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved earth-scraper. Fig. 2 is a side elevation. Fig. 3 is a plan view of the blank of the earth-scraper, and Fig. 4 is an enlarged view of one of the handle-sockets.

My invention relates to improvements in earth-scrapers; and it consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth.

In the accompanying drawings, A represents the blank from which my earth-scraper is formed, by stamping or shearing it from a plate of steel or other metal in one piece. The part *a* of the blank is bent up at right angles to the bottom to form the back of the earth-scraper, and the sides *b b* of the blank are bent up to form the sides of the scraper, the ends of the sides abutting or bearing against the ends of the back, and the intersections of the sides and bottom *c* of the scraper being curved or rounded.

d d represent angle-irons inserted in the angles formed between the sides and back and extending down a short distance over the bottom and securely riveted to the sides, back, and bottom of the scraper. In lieu of the two angle-irons *d d* a single angle-iron may be employed, extending continuously across the bottom and sides of the scraper and arranged in the angles formed by the bottom, sides, and back and riveted thereto. By this construction great strength of scraper is attained, the back, bottom, and sides being made in one piece and lateral strain obviated, and the parts of the scraper securely held together by the angle-irons, or angle-iron when one is employed, and the construction is cheap, light, and durable.

h h represent opposite hooks secured to the sides *b b* of the scraper and adapted to engage with eyes *i i* in the ends of a detachable bail, *k*, to which the power is applied.

l l represent opposite handle-sockets secured to the sides of the scraper, near its rear end. Each handle-socket *l* is composed of a bar, *m*,

tapering toward the front of the scraper and provided at its ends with loops *n n'*, tapering from rear to front, and the forward loop, *n*, smaller than the rear loop, *n'*, whereby the loops are adapted to receive a tapering handle, *o*, provided with a slot, *p*, for the passage of a headed bolt, *s*, screw-threaded at its outer end to receive a nut, *q*, and passing through a hole, *r*, in the scraper and bar *m*, and thence through the slot *p* in the handle. The handle-sockets *l l* are each cast or formed in one piece. By this construction, when a handle becomes loose it can be driven up in the loops of the handle-socket and the bolt tightened.

It is obvious that the slots may be made in the sides of the scraper and socket-bars and the holes made in the handles with the same results; but I prefer the construction above described.

s' s' are runners secured to the bottom of the scraper, and are of the usual construction.

I am aware that the body of an earth-scraper has heretofore been formed from a single plate or piece of metal; and I am also aware that angle-irons have heretofore been employed to connect the sides of earth-scrapers with their bottoms, and I therefore lay no claim to such constructions, my invention being confined to the construction and arrangement of parts as pointed out in the claims.

I claim as my invention—

1. The combination, with an earth-scraper formed of a single plate of metal and consisting of the bottom *c*, back *a*, bent angularly thereto, and sides *b b*, bent rounding from the bottom, and having their rear ends bearing against the ends of the back of an angle-iron or angle-irons *d*, secured to the back, sides, and bottom of the scraper, and arranged in the inner angles, between the back and sides, substantially as described, and for the purpose set forth.

2. The combination, with an earth-scraper provided with the holes *r r*, of the handle-sockets *l l*, each composed of a tapering bar, *m*, and tapering loops *n n'* of different capacities, all cast in one piece, slotted handles *o*, and bolts *s*, substantially as described, and for the purpose set forth.

ROBERT OLIVER BINGHAM.

Witnesses:

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