

No. 754,657.

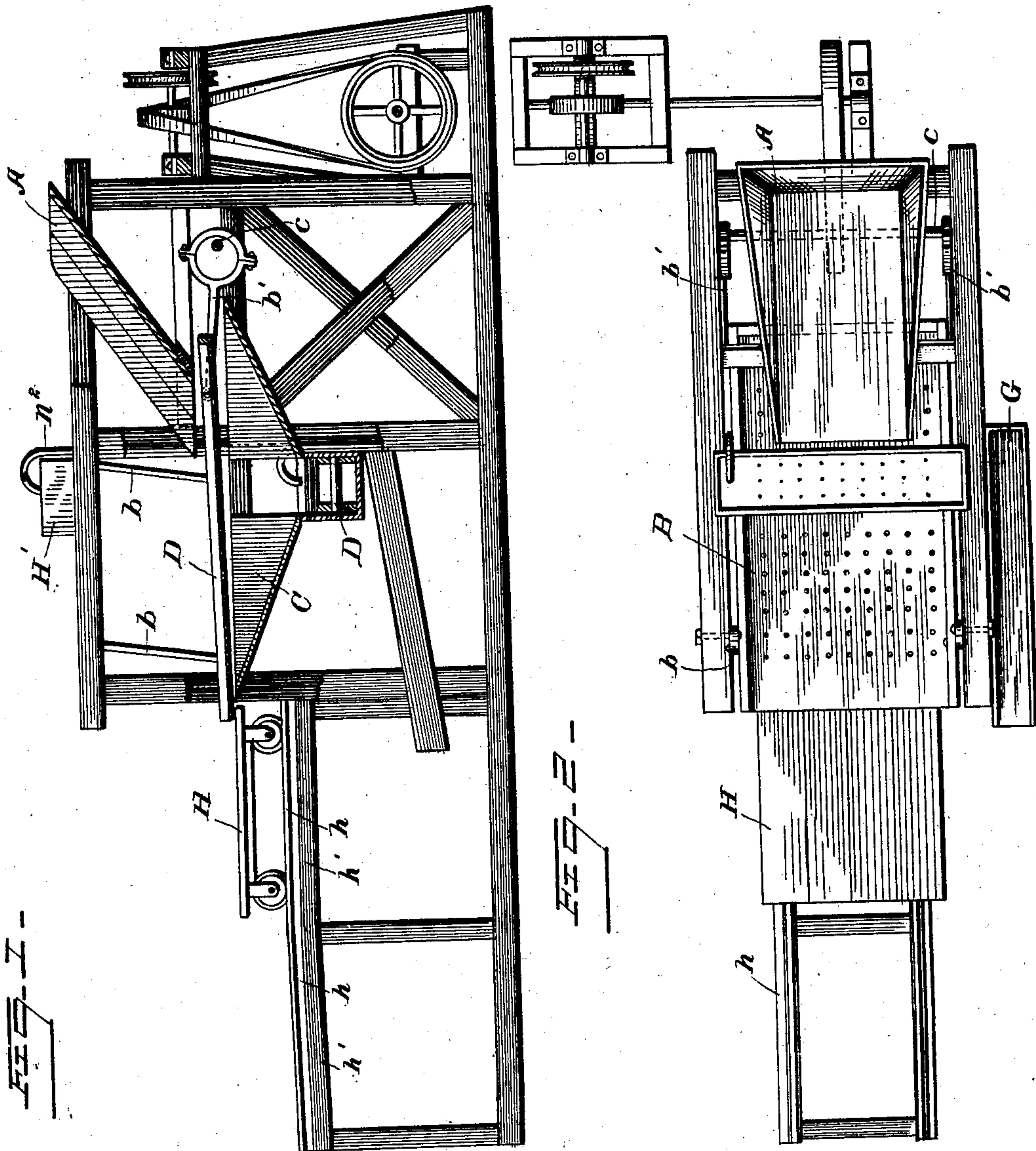
PATENTED MAR. 15, 1904.

A. C. LA BUD & H. J. BARTON.
GOLD SEPARATOR.

APPLICATION FILED JAN. 22, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

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George M. Anderson.

By

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NO MODEL.

2 SHEETS—SHEET 2.

FIG. 3.

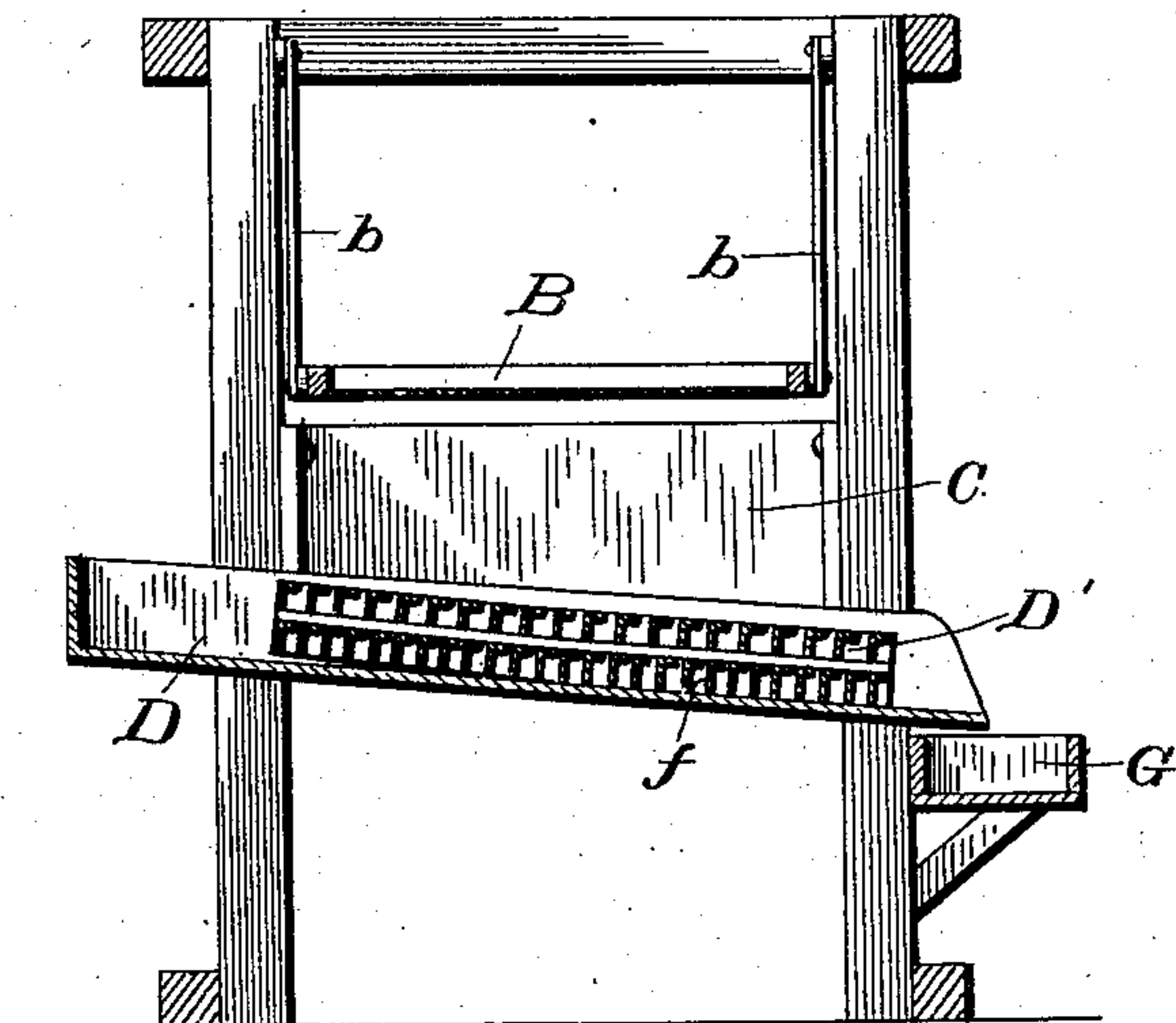


FIG. 5.

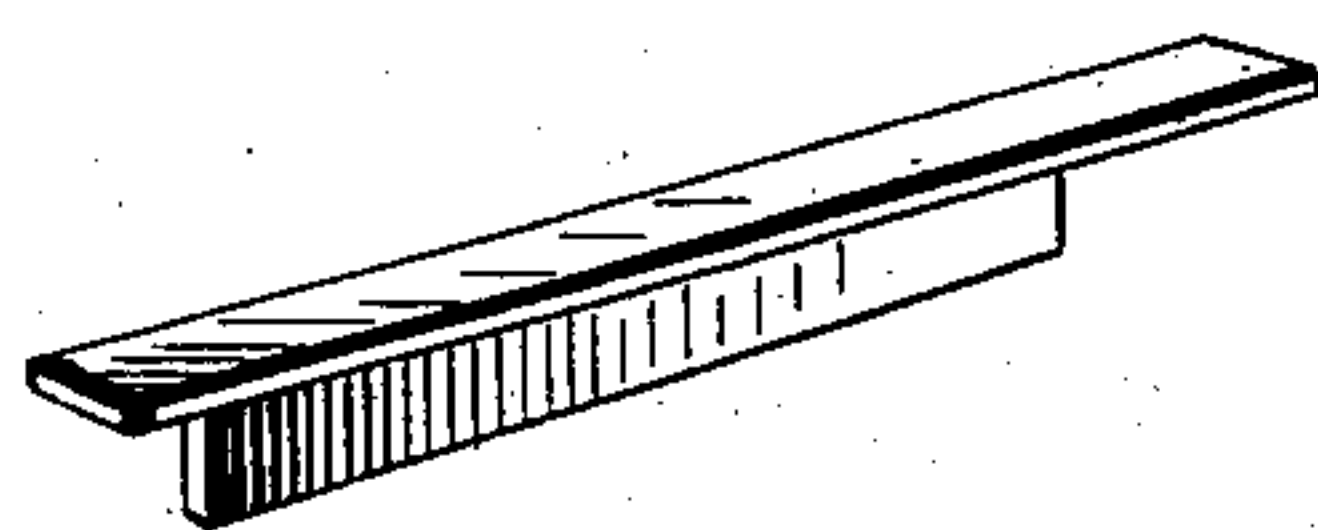
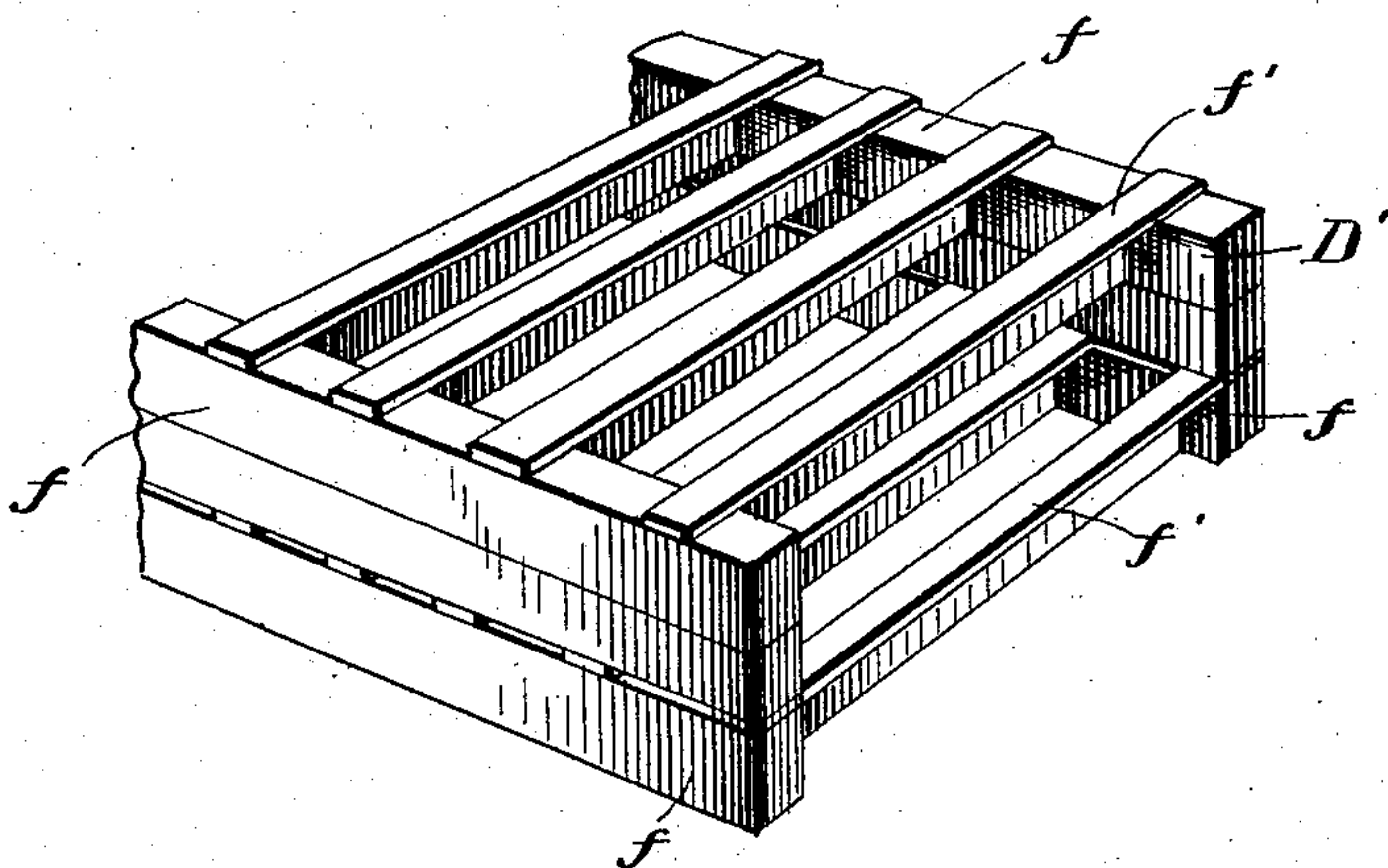


FIG. 4.



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AUGUST C. LA-BUD AND HENRY JOHN BARTON, OF OAKBAR, CALIFORNIA.

GOLD-SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 754,657, dated March 15, 1904.

Application filed January 22, 1902. Serial No. 90,780. (No model.)

To all whom it may concern:

Be it known that we, AUGUST C. LA BUD and HENRY JOHN BARTON, citizens of the United States, residing at Oakbar, in the county of Siskiyou and State of California, have invented certain new and useful Improvements in Gold-Separators; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to gold-separators; and it consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claim.

Figure 1 is a side elevation of our separator. Fig. 2 is a plan view of the same. Fig. 3 is a cross-section through the separator on a line with the sluice-box, and Figs. 4 and 5 are detail views of the riffles.

Referring to the drawings, the letter A designates the chute upon which the dirt or gravel is dumped and which leads to the perforated shaking-table or screen B, suspended by pivoted hangers *b* and vibrated longitudinally by eccentric-rod-and-strap connection *b'* with the shaft *c*, driven by suitable power. Below the swinging screen, the perforations of which are coarse, having a diameter of one and one-half inches, is the hopper C for the sluice-box D, having riffles of peculiar character arranged therein. These riffles are in two sets, one above and separated from the other by a space of one and one-fourth inches. The riffles are carried by boxes or frames D', having side frame-bars *f*, connected by the parallel transverse riffles *f'*, each of which is of angle or L form in cross-section, the shorter arm of the L being uppermost and extending rearwardly. Each riffle of the upper set is separated from its neighbors of the same set by a space of one inch. The riffles of the lower set, which are loaded with quicksilver, are separated from each other by a space of three-quarters of an inch. The peculiar form of these riffles has special advantages for increas-

ing commotion in the water, which will prevent packing of the gravel in the riffles. The first boxes of these riffles are set upon a higher grade than the lower boxes, facilitating the extrication of the underflow. The sluice-box leads into an undercurrent G, which is provided with the latest devices for saving gold. The vibratory screen discharges at its lower end into a self-dumping rock-car H, such car being for the purpose of transferring the coarse rocks after being separated and washed and being mounted upon inclined tracks *h* of a raised platform *h'*. H² designates suitable piping for supplying water to the perforated water or spray box H', located above the rocker, and for supplying the sluice-box with water, which is usually pumped from the pit.

In the present case the gravel is hoisted to a height of over fourteen feet above the surface of the ground, thus allowing a dump of nine feet for the sluice-box and a twelve-foot dump for the rock-car, besides the fall of the sluice-box. The dirt is graded at once as it passes over the vibratory screen to a size of one and one-half inches in diameter and is again graded twice over to sizes of one inch and three-quarters of an inch in diameter by the riffles in the sluice-box.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a gold-separator, the combination of a sluice-box, and a plurality of sets of inverted-L-form riffles therein, the lower set of riffles lying on the bottom of the sluice-box and slightly spaced from each other, and the upper set directly overlying said lower set and having its riffles more widely spaced from each other than those of the lower set, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

AUGUST C. LA BUD.

HENRY JOHN BARTON.

Witnesses:

H. B. WARREN,

HUGH FOSTER.