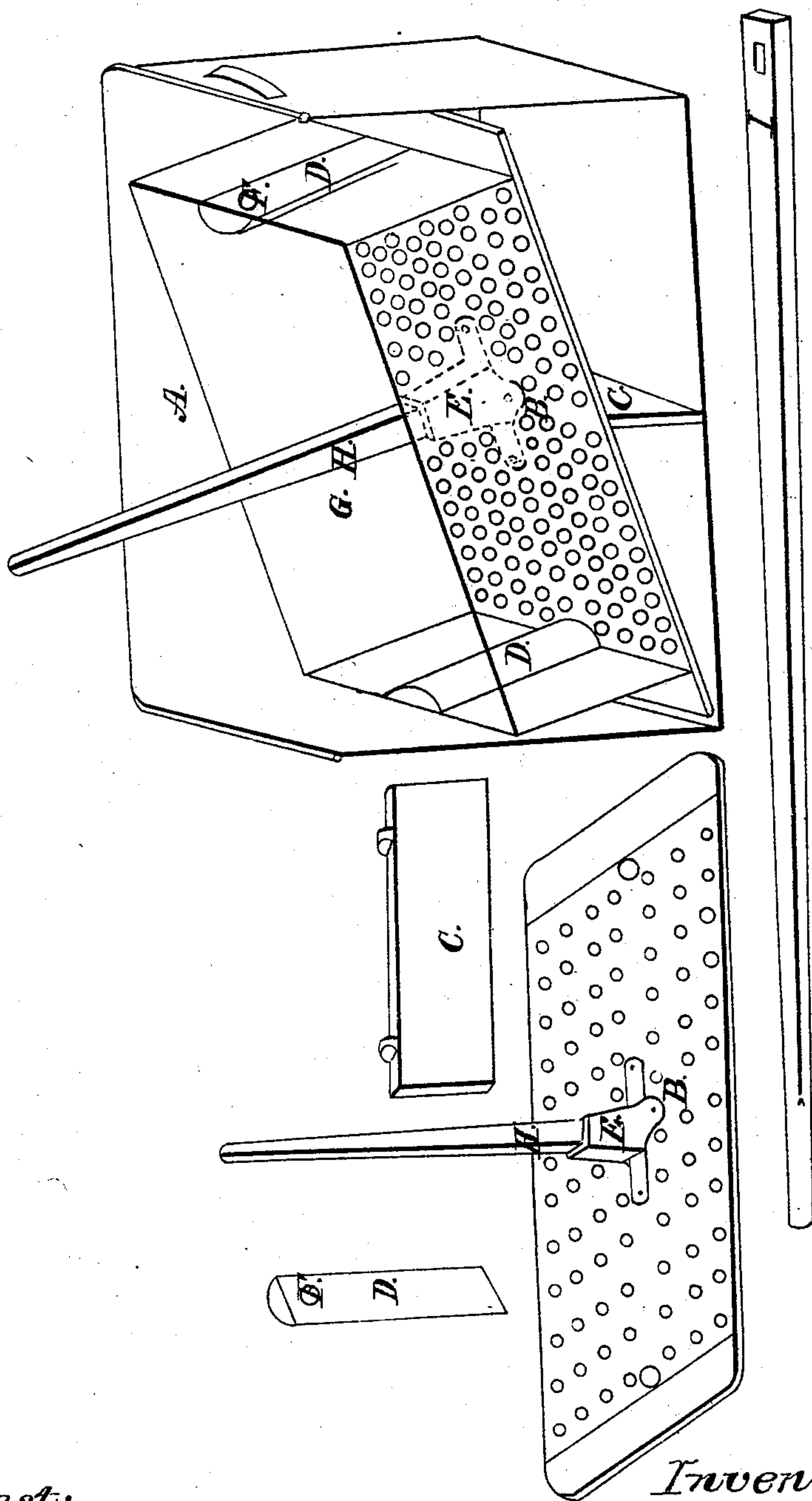


*Bulla & Birdsell.*

*Washing Mach.*

*N<sup>o</sup> 98,845.*

*Patented Jan. 18, 1890.*



*Attest.*

*John F. Kirby,*  
*Thos H Bulla*

*Inventors:*

*Milton V. Bulla*  
*James B. Birdsell*

# United States Patent Office.

MILTON V. BULLA AND J. BENJAMIN BIRDSELL, OF SOUTH BEND,  
INDIANA.

*Letters Patent No. 98,845, dated January 18, 1870.*

## IMPROVED WASHING-MACHINE.

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

*To whom it may concern:*

Be it known that we, MILTON V. BULLA and J. BENJAMIN BIRDSELL, both of the city of South Bend, in the county of St. Joseph, and State of Indiana, have jointly invented a new and useful combination of arrangements for Washing or Cleansing Clothes; and we do hereby declare that the following is a full and clear description of the said invention, reference being had to the drawings annexed, as part of this specification.

The nature of our invention consists in the application of a perforated tilting-board, resting, at its centre, on a division-board, together with other appurtenances, to be placed within any common wash-boiler, for the purpose heretofore described; and

To enable others to make and use our invention, we will proceed to describe its construction and operation.

A represents a common wash-boiler, with three (3) sides and bottom shown.

B represents a perforated tilting-board, of such dimensions as to be admitted (horizontally) within the four (4) sides of boiler A.

C represents a board, used for the purpose of dividing the water below the tilting-board B; also, as fulcrum for middle or centre of tilting-board B.

The board C stands up edgewise, resting on bottom, and reaching from side to side across centre of boiler A, and is from three (3) to four (4) inches in width, according to size of boiler used.

D D represent tin valve-tubes, placed perpendicularly near each end, and covering openings made through tilting-board B.

F F represent valves on inside of tubes D D, one of which is not shown in the drawings.

G represents a cage, of either wire screen or perforated tin, extending around the extreme edges of

tilting-board B, of such dimensions as not to interfere with sides or cover of boiler A.

E represents a galvanized-iron socket, fastened to centre or middle of tilting-board B, to receive a lever or handle, H.

H represents a handle or lever, standing perpendicular to tilting-board B, fastened in socket E, extending upward through slotted hole in boiler-cover.

I represents a handle or lever, which may be fastened horizontally to the end of handle or lever H, to enable a person, when working the aforesaid arrangements, to be at a reasonable distance from the fire.

Within the cage G are placed the articles to be cleansed or washed, and, by means of lever I, in connection with lever H, socket E, and tilting-board B, resting on centre-board C, the tilting-board B and its appurtenances are made to oscillate inside of boiler A, thereby jetting or forcing the hot suds and steam, as fast as generated, through perforations or holes in tilting-board B, and among the articles to be cleansed, the suction of tilting-board B in raising each end alternately, being relieved by valves F F, in tubes D D.

The foregoing specification being had,

What we claim as our invention, and wish to secure by Letters Patent, is—

1. The division-board C, in combination with the tilting-board B.

2. In combination with the above, the screen or cage G, tubes D D, with their valves, socket E, levers H and I, as shown, for the purpose described.

MILTON V. BULLA.  
J. BENJ. BIRDSELL.

Witnesses:

V. O. BIRDSELL,  
A. B. MERRITT,  
CHAS. MCNEAL,  
H. WALEY.