

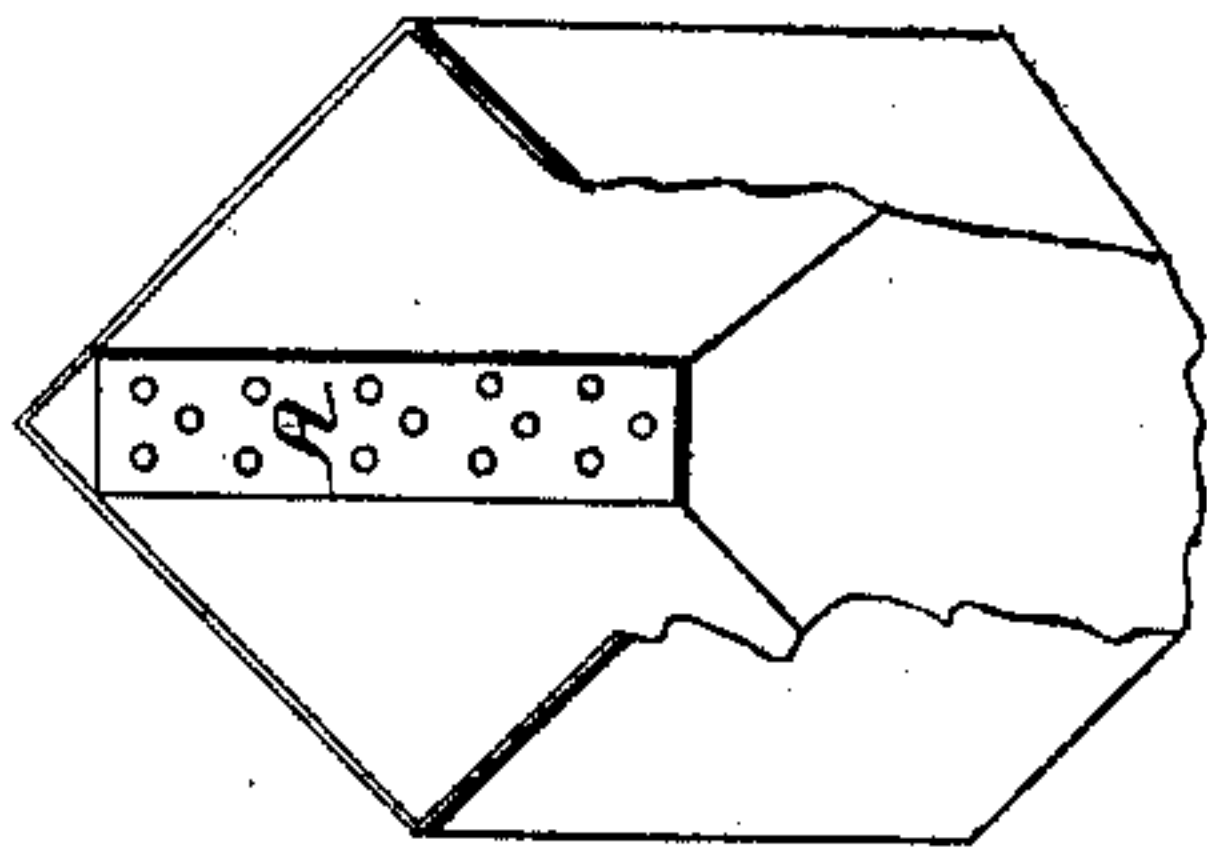
*J. Q. Cowell,*

*Tan Vat.*

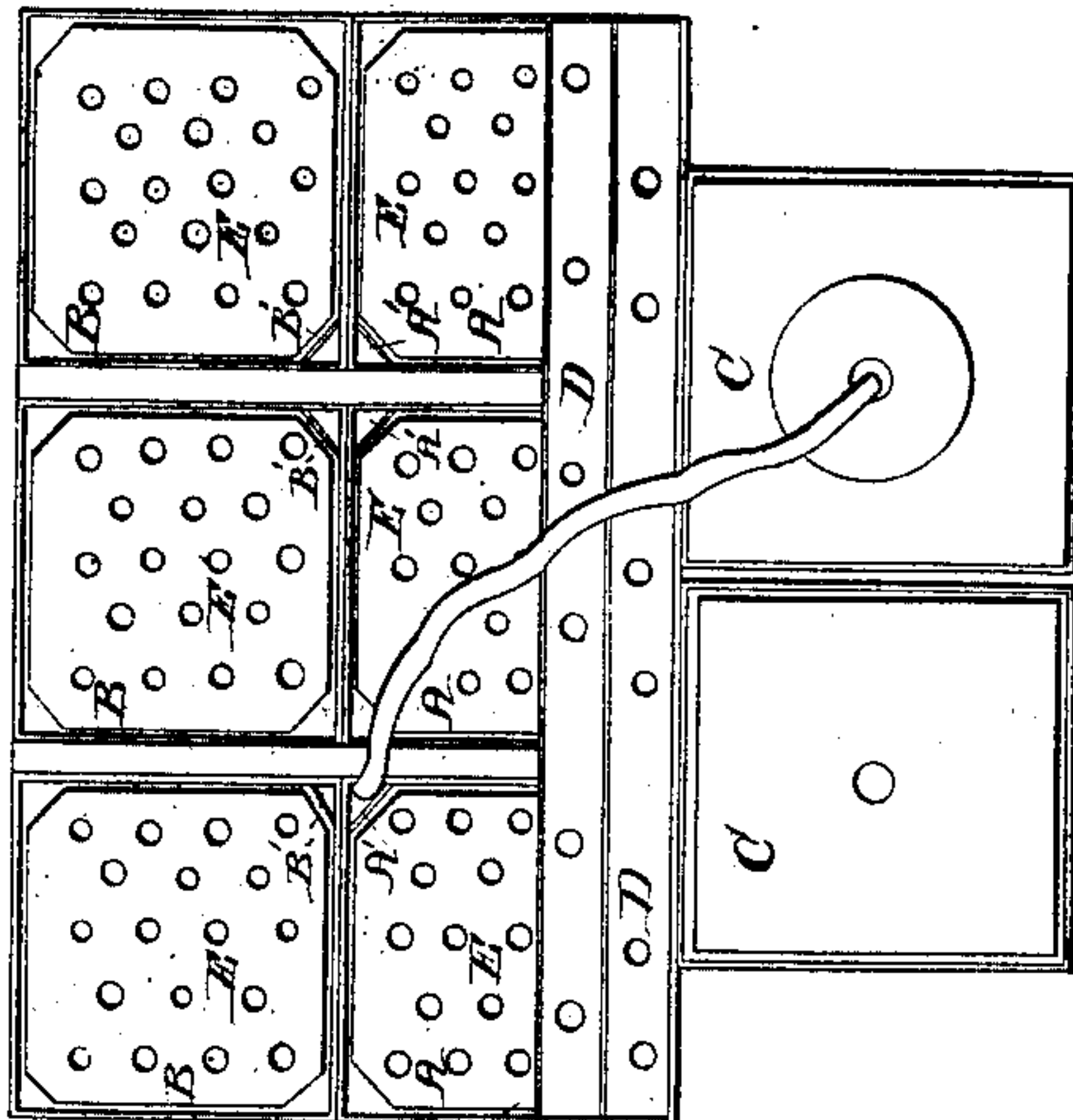
*N<sup>o</sup> 27529.*

*Patented Mar. 20, 1860.*

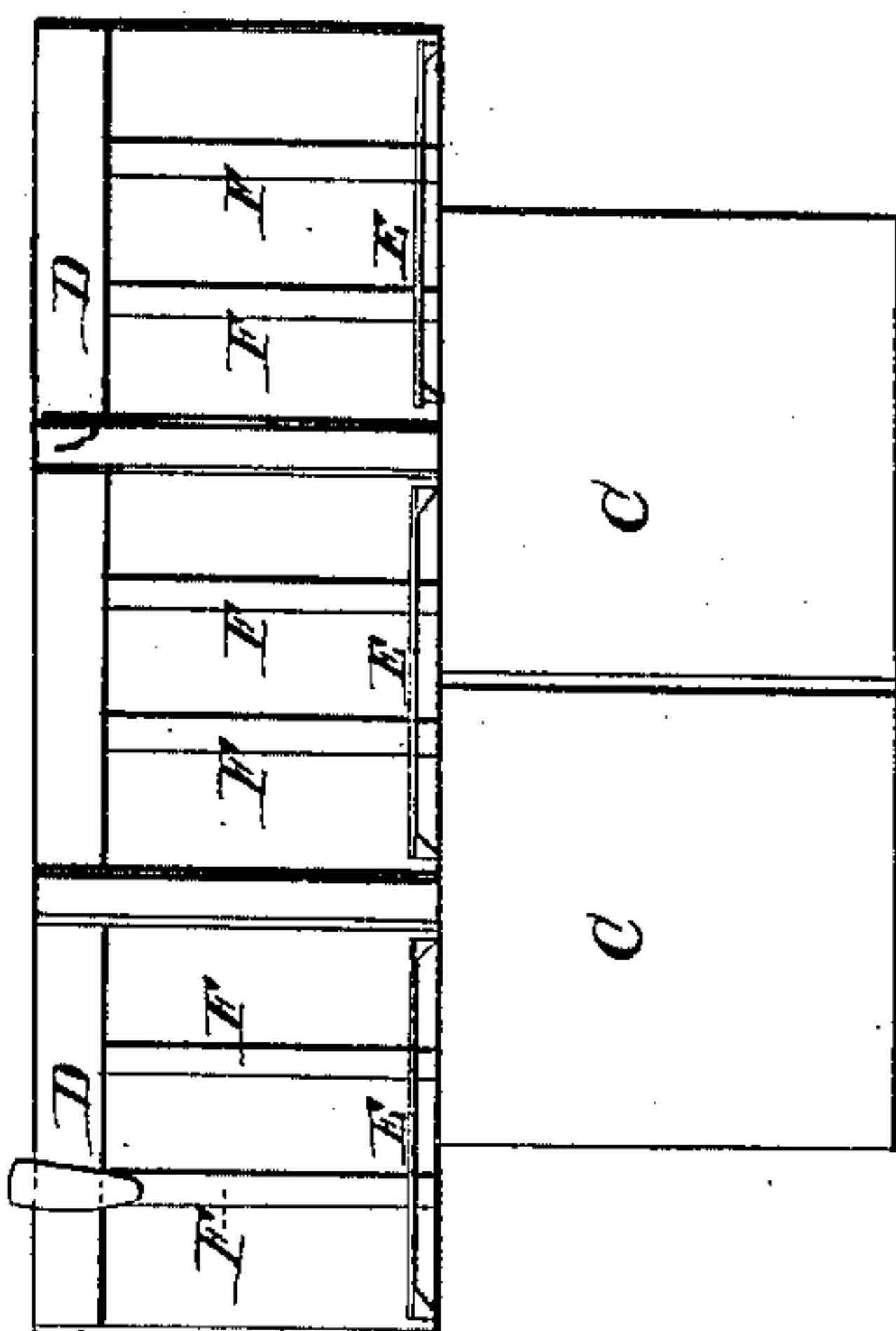
*Fig. 4.*



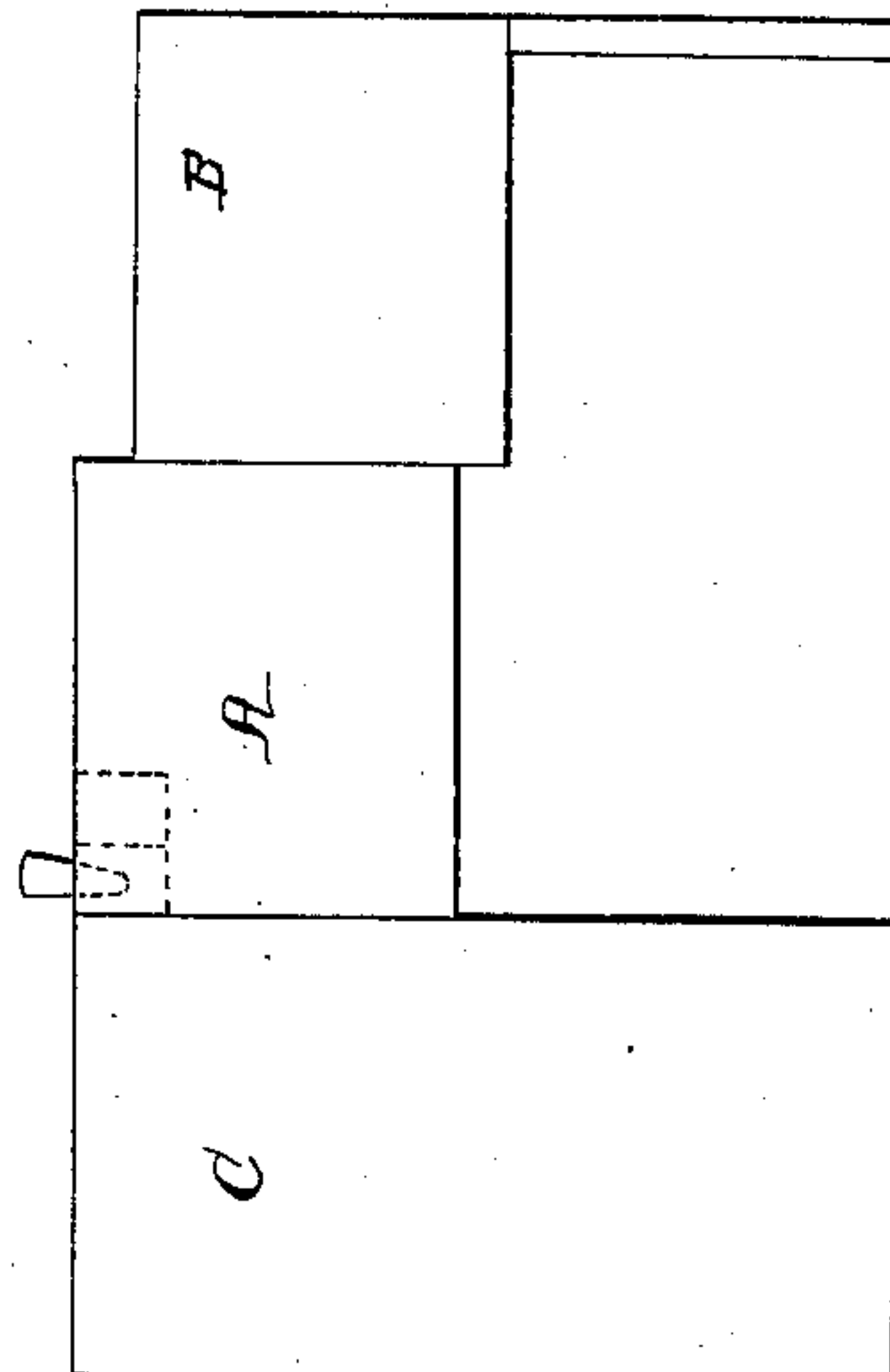
*Fig. 2.*



*Fig. 3.*



*Fig. 1.*



*Witnesses;*  
*L. A. Lyon*  
*Jos. C. Clayton*

*Inventor;*  
*John L. Cowell*  
*per Attorney*  
*J. G. Clayton*

# UNITED STATES PATENT OFFICE.

JOHN Q. COWELL, OF VERNON, INDIANA.

## APPARATUS FOR TANNING.

Specification of Letters Patent No. 27,529, dated March 20, 1860.

*To all whom it may concern:*

Be it known that I, JOHN Q. COWELL, of Vernon, in the county of Jennings and State of Indiana, have invented certain new and  
5 useful Improvements in Tanneries; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked  
10 thereon.

Figure 1 is a side elevation. Fig. 2 is a plan view. Fig. 3 is a sectional view through the leach vats. Fig. 4 is a perspective view of the handling vat.

15 To enable others skilled in the art to make and use my invention I will describe its construction and operation.

The nature of my invention consists in such an arrangement of the several vats as  
20 that the fluids contained in any vat may be transferred to any other vat in the tannery by means of a system of troughs, pipes, and siphons.

A the leach vats. B the handling vats.  
25 C the reservoir vats. D, the troughs. E the false bottoms of the leach and handling vats. A' partitions in one corner of each leach vat. B' the partitions in one corner of each handling vat. F the pipes connecting the troughs  
30 and leach vats. G the holes in troughs leading to leach vats. F' and G' plugs or stop-cocks for closing pipes F, and holes G.

It will be seen that the upper edges of the leach vats A, withdrawal vats C, and troughs  
35 D are on the same level; and that the upper edges of the handling vats are on the same level with the bottoms of the troughs D. The pipes F have at their lower ends openings sufficiently large for the free passage of  
40 the fluids, these openings being below the false bottoms. The partitions or triangular pipes A' and B', having communication with

respective vats below the false bottoms, are for the reception of the hose siphon by which the fluids are withdrawn. 45

In the operation of my invention the troughs D are fed from a pump, or in other suitable manner; the leach vats, or any one or more of them, can be filled at will by means of plugs or stop-cocks F' and G', the  
50 pipes F leading the water under the false bottoms, and the holes G leading the water above the false bottoms. If now, I wish to draw off the liquid from the leach vats into the handling vats, I have only to insert pipe  
55 siphon M (having first filled it) in one of the partitions A', and the other in the vat to be filled, the siphon will then draw off as much fluid as is wished. When I wish to draw off the liquid from the handling vats  
60 into reservoir or withdrawal vats C, a like operation with the siphon will accomplish the result.

The advantages of this arrangement over any other tannery are very great; in all other  
65 tanneries the transfer of fluids has been effected under ground, and hence were very liable to become out of order, and very difficult to repair, all this is avoided in my invention, inasmuch as the whole means of  
70 transfer is visible and easy of access.

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

The arrangement of the vats, and troughs  
75 to each other as set forth, when said vats, are provided with an angular space separated from the basin of said vats by partitions as set forth.

JOHN Q. COWELL.

Witnesses:

M. REAEL,  
A. S. WELTON.