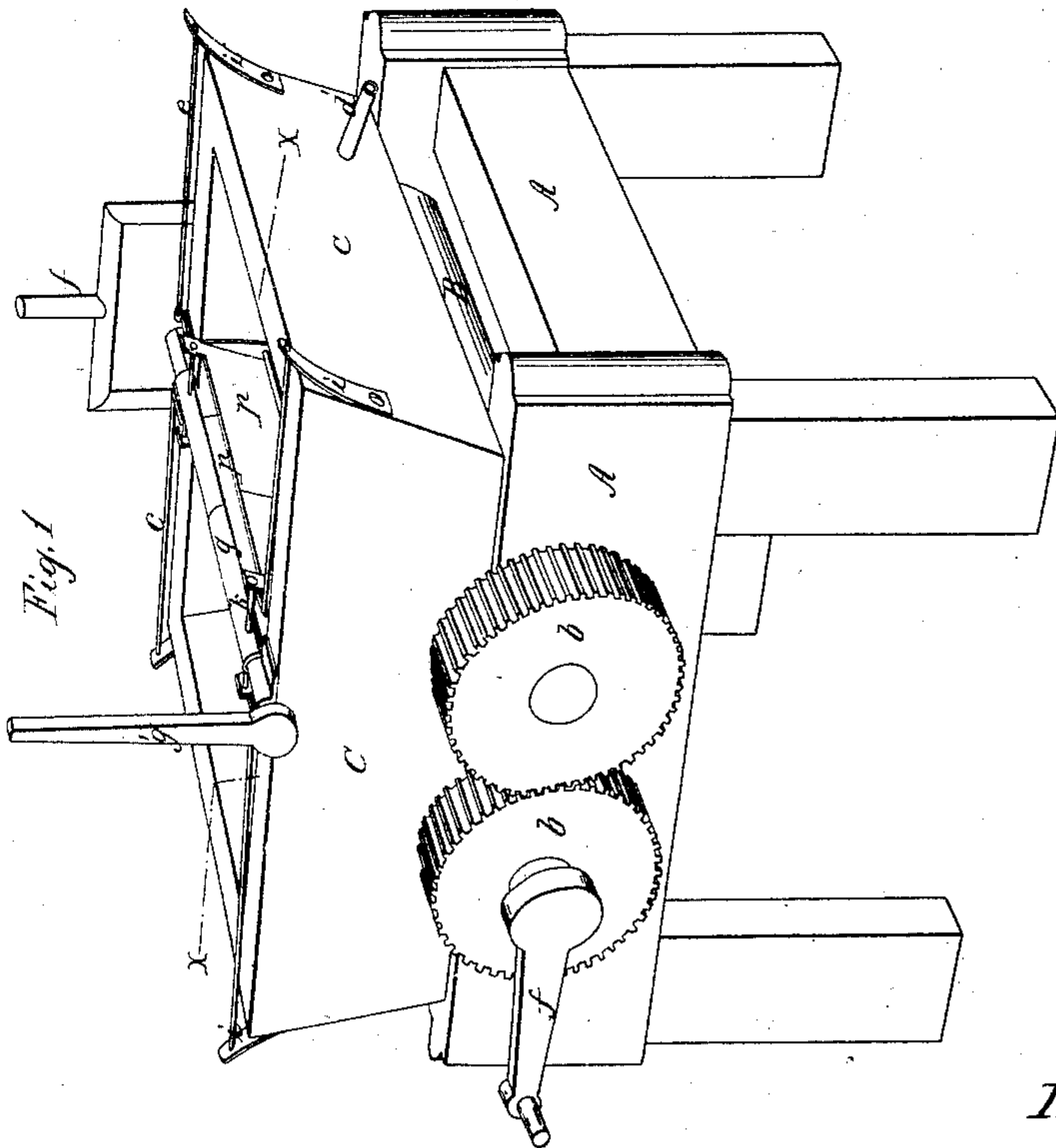
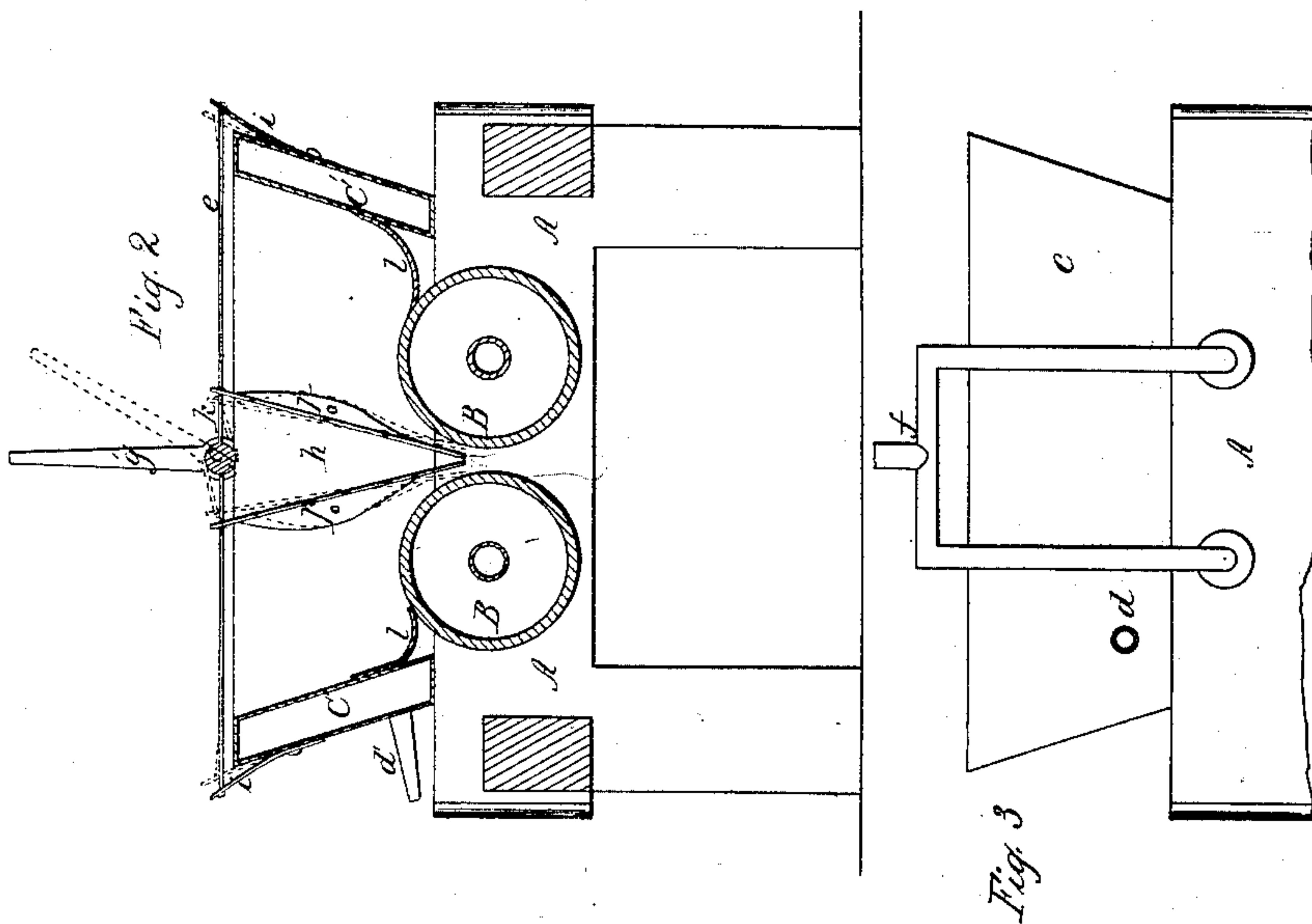


*Pomeroy & Allen.*  
*Roofing Apparatus.*

*N<sup>o</sup> 24,954.*

*Patented Aug. 2, 1859.*



*Witnesses*  
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# UNITED STATES PATENT OFFICE.

PHINEHAS POMEROY AND J. G. ALLEN, OF MIDDLETOWN, OHIO.

## IMPROVEMENT IN MACHINERY FOR MAKING ROOFING-CEMENT.

Specification forming part of Letters Patent No. 24,954, dated August 2, 1859.

*To all whom it may concern:*

Be it known that we, PHINEHAS POMEROY and J. G. ALLEN, of Middletown, in the county of Butler and State of Ohio, have invented a new and useful Improvement in Roofing-Machines; and we do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon and made to form a part of this description.

The nature of our invention consists, first, in the employment of hollow metallic cylinders arranged in such manner that steam may be applied to their interior surfaces for heating purposes; second, to the construction and arrangement of a double-walled tank having an interior chamber or space capable of receiving steam for heating the contained composition for roofing, and preventing the same from adhering to the inner surface of the tank and facilitating its flow to the paper or other material upon which it is to be laid; third, to a mode of operating valves or gates, by means of which the flow of the roofing composition may be shut off from the rollers and paper when desired.

In reference to the accompanying drawings, Figure 1 represents our invention in perspective with all its parts arranged as for operation. Fig. 2 is a vertical sectional elevation taken through the red line *x x*, showing the mode of construction and the arrangement of the tank and hollow cylinders. Fig. 3 is a sectional side elevation showing the provision for introducing steam to the cylinders.

A is the frame upon which the machine is arranged.

B are hollow metallic cylinders, having bearings in the frame A, as shown in Fig. 3, and provided with cog-wheels *b*, by means of which they are made to rotate.

F (shown in Figs. 1 and 3) is a steam-pipe, by means of which steam is admitted to the interior of the cylinders B.

C is a tank, constructed with double walls, as shown in Fig. 2, arranged in such manner as to form the inner chamber C', which is capable of receiving steam, which may be admitted to said chamber by means of pipe *d* and discharged through pipe *d'*.

*p* are valves pivoted at their centers to the tank C.

*i* are springs attached to the tank C at its corners, as shown in Figs. 1 and 2.

*e* are bent rods attached to the springs *i* and the tops of the valves *p* and arranged in such manner that when the springs *i* are extended the valves *p* will be in proper position to allow the roofing composition contained in the tank C to flow in proper quantity between the cylinders B.

K are cords attached to the tops of the valves *p* and passing through the crank-shaft *g*, so that by depressing the lever *g'* the shaft *g* will be caused partially to rotate, thereby winding the cord K upon said shaft and closing the valves *p* against the cylinders B, as shown by the red lines in Fig. 2.

When it is required to open the valves, the lever *g'* will be released, when the springs *i*, through the medium of rods *e*, will force the valves to their proper open position.

The cylinders B may be made to rotate by means of a crank *f*, or by pulleys or pinion-wheels, as is usual.

The operation of our invention may be described as follows: Composition suitable for roofing purposes will be placed within the tank C, steam being admitted into the cylinders B and chamber C' in such quantity as to heat the surfaces which are exposed to the said composition sufficiently to prevent it from adhering to the rollers or cylinders B and tank C and to render its flow even and smooth. The paper upon which the composition is to be laid will be fed down through the space *h* between the valves *p*, and as it passes between the cylinders B it will receive upon both sides the proper coating of the roofing composition, so that in one operation the strips intended for roofing purposes are completed and after sufficient drying are ready for use.

We do not wish to be understood as claiming the hollow metallic cylinders or the double-walled tank when taken or used separately or the heating of them by steam simply; but—

What we do claim as new, and desire to secure by Letters Patent, is—

The employment of the double-walled tank C, in combination with the hollow metallic cylinders B and valves *p*, all being constructed and arranged to operate substantially as and for the purpose set forth.

PHINEHAS POMEROY.  
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