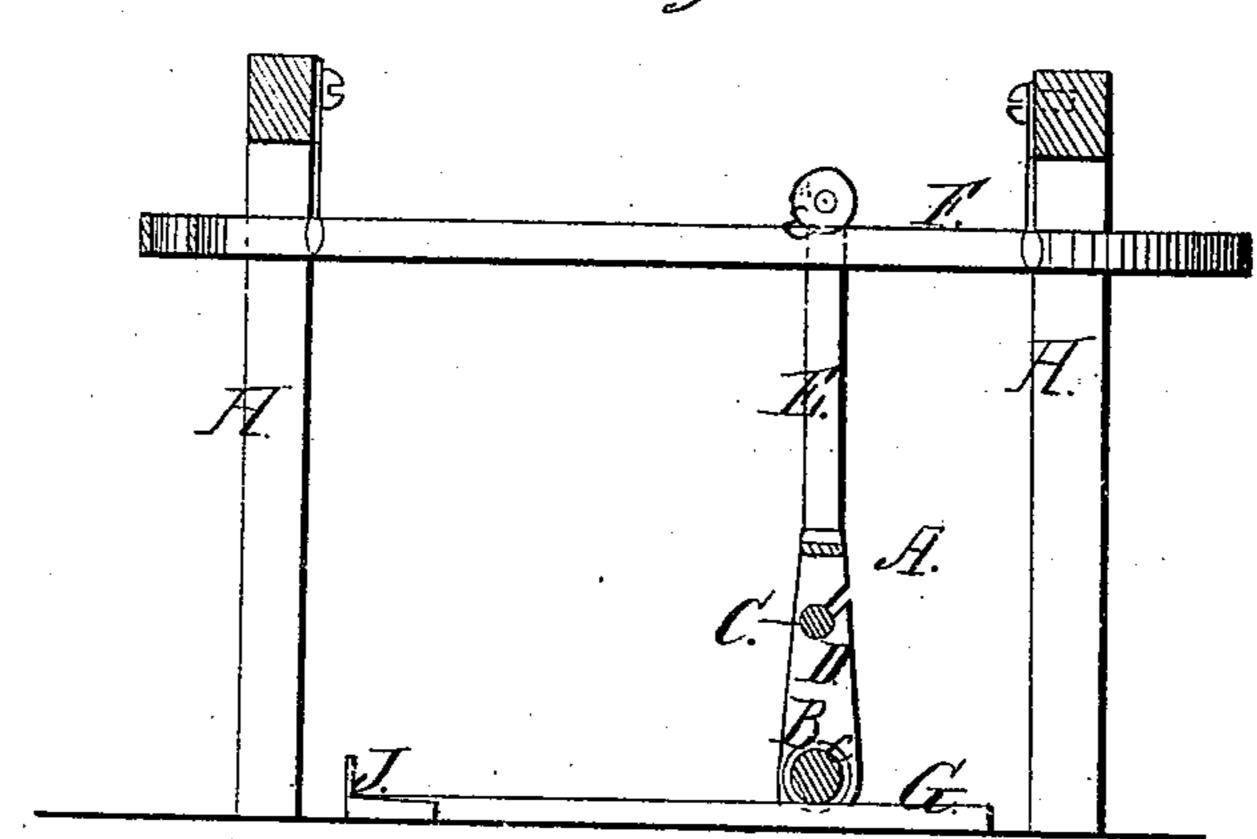
J.T. Cole.

Roofing Apparatus.

N 17/257.

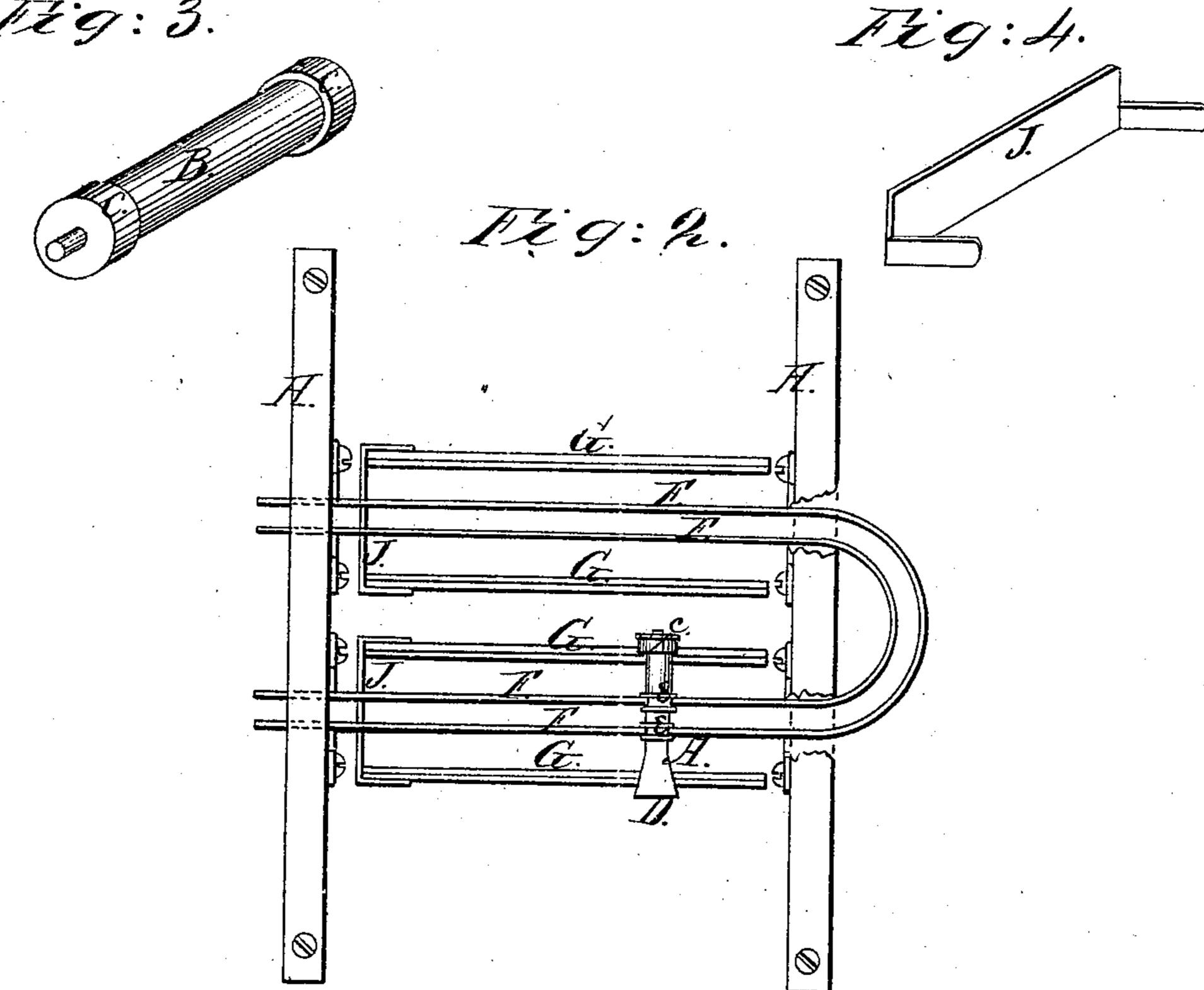
Patented Am: 28,1868.

Fig: 1.



12g:3.





Milnesses:

Inventor:

Anited States Patent Pffice.

JAMES H. COLE, OF ADRIAN, MICHIGAN.

Letters Patent No. 77,257, dated April 28, 1868.

IMPROVED ROOFING-MACHINE.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, James H. Cole, of Adrian, in the county of Lenawee, and State of Michigan, have invented a new and improved Machine for Making Roofing; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which-

Figure 1 is a longitudinal section.

Figure 2, a top view.

Figure 3 is a perspective view of the roller B.

Figure 4 is a perspective view of the guide J.

This invention is designed as an improvement upon the device recently patented by Edmund Richardson and James H. Cole, for a process for making roofing, and machines for the same; and consists in supporting the rolling-instrument employed in said process by an arm, which reaches to and travels upon ways overhead, so that the operator can travel alongside of the instrument, and direct the same.

In the drawings, A represents the rolling-instrument referred to above, and consisting of the rollers B and C, the frame D, and the arm E. FF represent parallel ways arranged over the beds G G, in which the sheets of roofing are made, and supported by a frame HH. The top of the arm E is provided with two trucks or rollers e e, which rest and travel on the ways F F, supporting, in this manner, the arm E, and the greater part, if not all, of the weight of the rolling-instrument. The ways may be so attached to the frame H that they can be moved slightly up or down, to enable the roller B to be adjusted in relation to the bed over which it travels.

Two beds G G, and two sets of ways F F, may be provided, the two sets of ways being connected by curved ways at one or both ends, as seen at II, so that the instrument will travel round from one bed to the other without stopping. The operator will walk alongside of the rolling-instrument, guiding it by hand, during the process, by means of the frame D, which, if necessary, may be provided with projecting handles for his convenience.

J is a loose attachable and detachable guide, over which the felt runs when the machine is in operation. It is stationed at the end of the bed, as seen in fig. 2, and holds the felt in position, enabling it to feed accurately during the process. If the felt is started properly, as it will be by the use of this guide, it will run perfectly true, while without the guide it will be liable occasionally to run off on one side or the other.

In order to still further diminish the chances of the felts running off, I provide guide-collars or flanges c c, at each end of the large roller, between which the felting must run when the machine is in operation. These collars may be separate pieces or rings affixed to the roller, or the latter may be made slightly smaller along the bearing-surface than at the ends, leaving solid shoulders or rings c c at the extremities, as shown in the drawings.

This apparatus could be employed with any kind of motive-power, being as available with steam, water, or horse-power, as by hand. There will ordinarily be no advantage, however, in employing great power, as the machine must move slowly, and hand-power will answer every purpose.

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

- 1. Supporting and guiding the rolling-instrument A, by means of the ways F F, substantially as and for the purpose set forth.
 - 2. The guide J, when applied at the end of the bed G, substantially as and for the purpose described. To the above specification of my improvement. I have signed my hand, this eleventh day of March, 1868. JAMES H. COLE.

Witnesses:

N. K. ELLSWORTH, CHAS. A. PETTIT.