

J. W. Wheeler.

Roofing Apparatus.

N^o 84,074.

Patented Nov. 17, 1868.

Fig: 1.

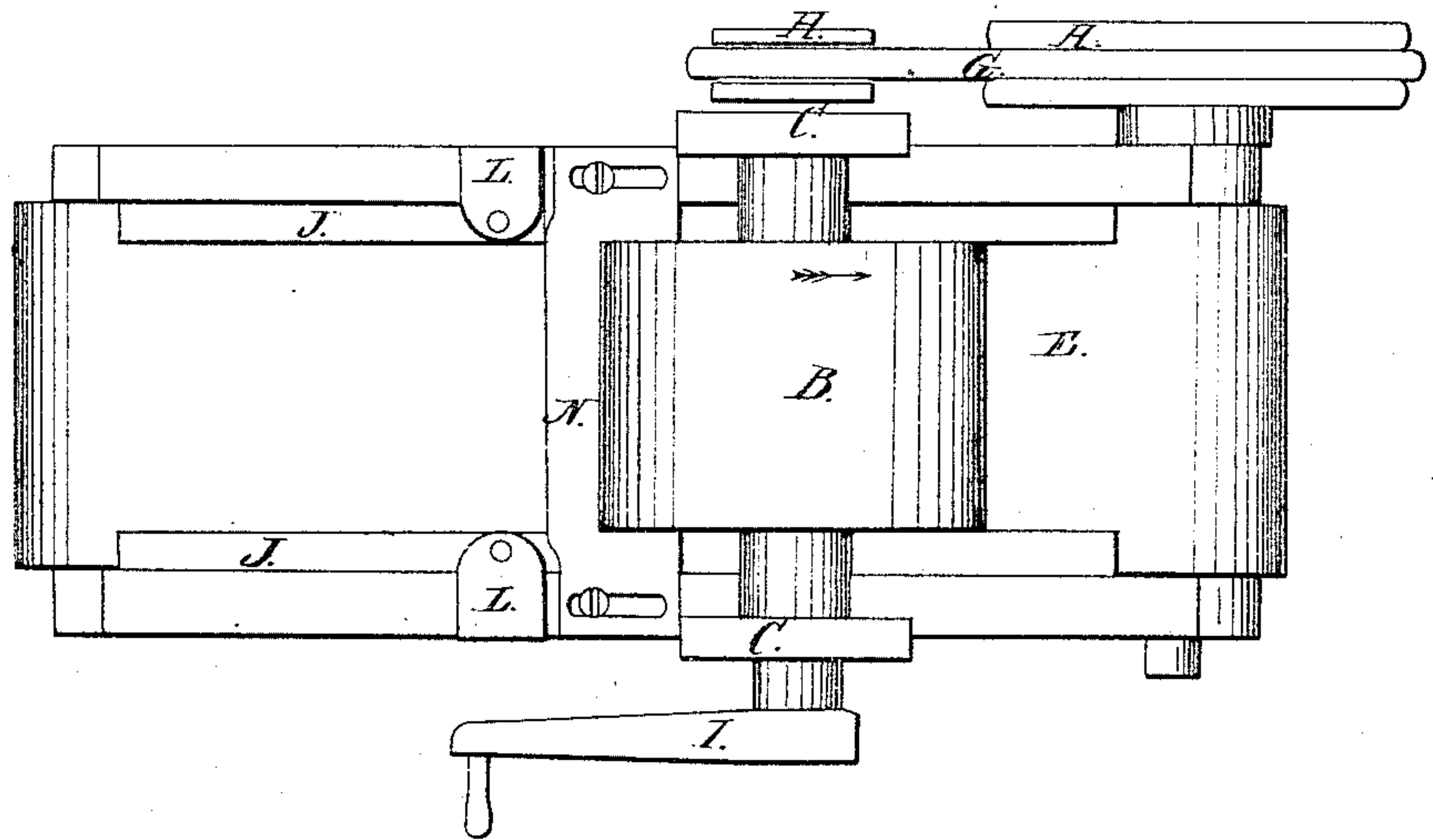


Fig: 2.

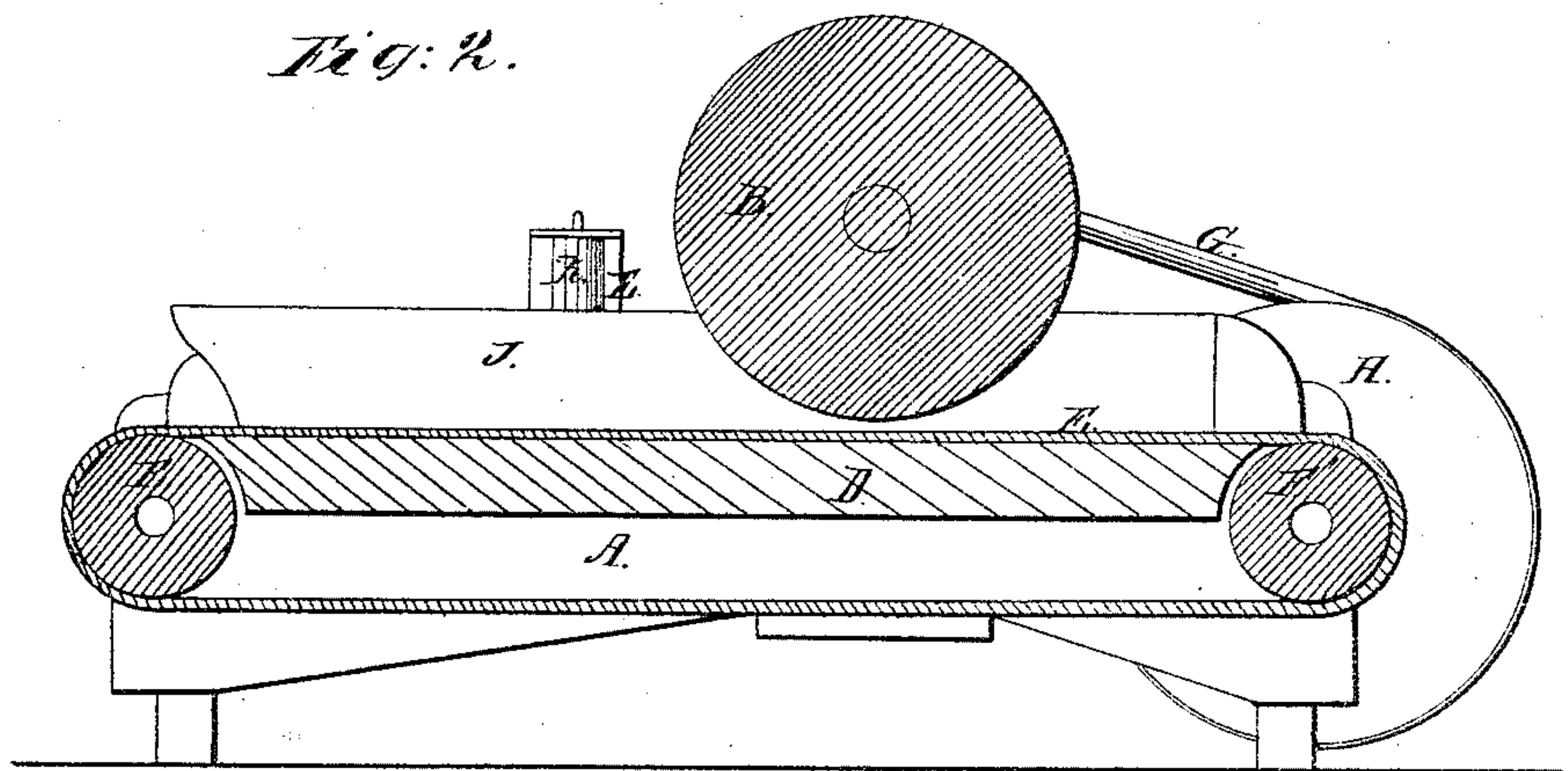
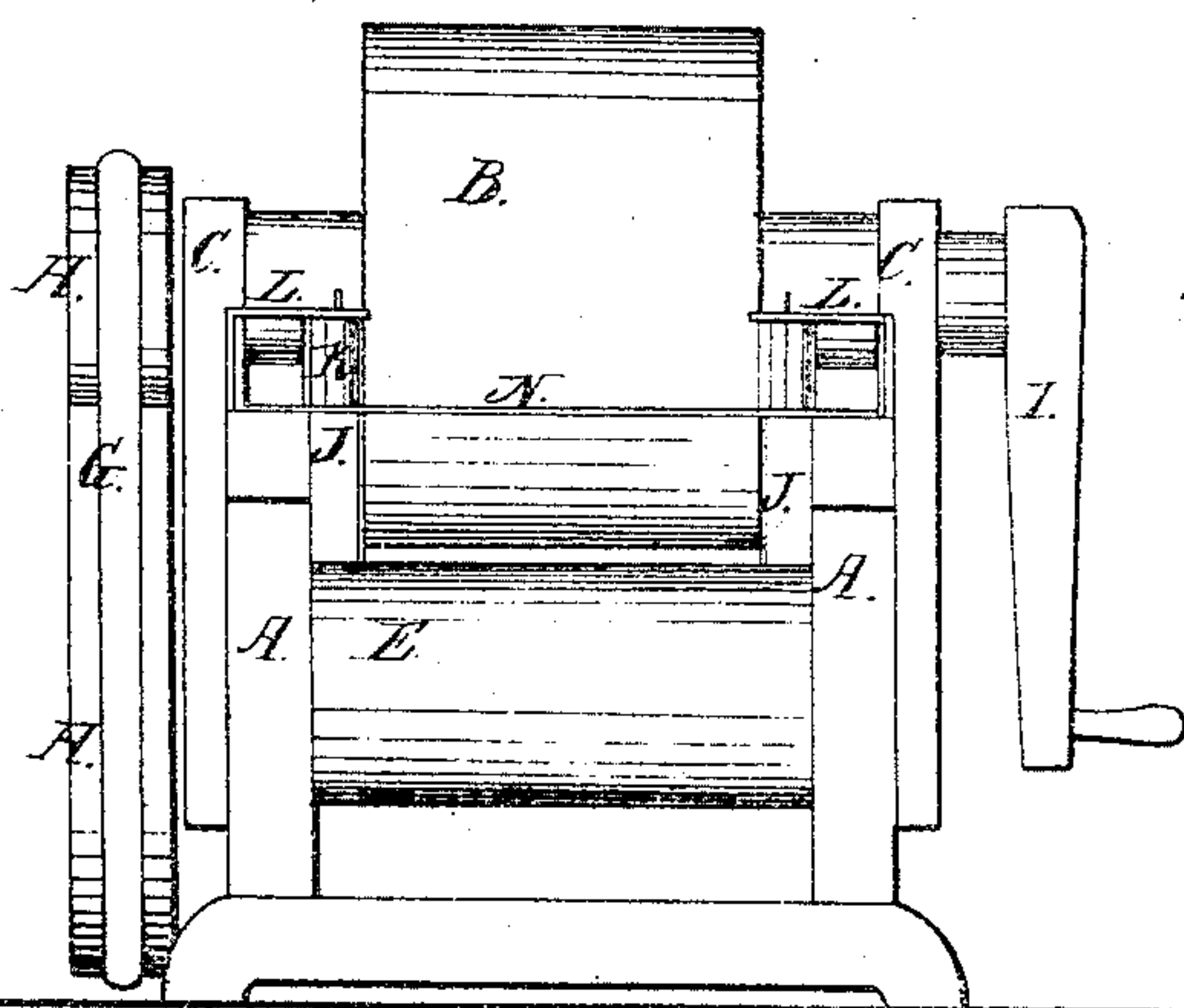


Fig: 3.



Witnesses:
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United States Patent Office.

JOHN W. WHEELER OF CLEVELAND, OHIO, ASSIGNOR TO H. H. WHEELER, OF NEW YORK, N. Y.

Letters Patent No. 84,074, dated November 17, 1868.

IMPROVED MACHINE FOR SPREADING PAINT OR MASTIC.

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

To all whom it may concern:

Be it known that I, JOHN W. WHEELER, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented a certain new and improved Machine for Spreading Paint, Mastic, &c.; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a top view of the machine.

Figure 2, a longitudinal section.

Figure 3, a view of the end.

Like letters of reference refer to like parts in the different views.

The nature of this invention relates to a machine so constructed and arranged that any plastic material, as thick paint or mastic, can be spread upon cloth, paper, and other like surfaces, smoothly, and of a uniform thickness.

This machine consists of a frame A, figs. 2 and 3, provided with close sides, between which is journaled a roller or spreader, B, in adjustable standards or bearings, C.

Immediately under the roller is a bed-plate, D, over which passes an endless belt or apron, E, moved or carried by a pair of rollers, F F', one in each end of the frame, as shown in fig. 2.

The roller F' receives motion from the spreader or roller B, by means of a belt, G, running in grooved pulleys, H, keyed to the shafts of the rollers F' and B, all of which are operated by the crank I.

J is a pair of supplementary sides or guards, placed against the sides of the frame, as shown in fig. 1, and under the lower edge of which the edges of the endless apron runs, and are pressed down upon the same by the springs K, secured in the adjustable stays L, the purpose of which will hereinafter be shown.

Having thus described the construction and arrangement of the machine, the practical use and operation of the same are as follows:

It is well known that paper, either impregnated or covered with some plastic fire and weather-proof material, is extensively used for roofing. When used as a mastic only, instead of a saturating-compound, it is spread on the sheet with a trowel constructed especially for that purpose—a work performed with great labor, much time, and hence expensive; also, the work is not well done, as the material is not evenly laid on, it being thicker in some places than others, rendering the work variable in thickness.

To avoid this expensive labor, this machine is intended, and operated thus:

A strip of paper of the required width is laid upon the apron at X, referred to. The edges of said cloth are made to pass under the guards J, and the end brought to the face of the roller or spreader B. On the cloth is now thrown the mastic or paint, filling that part of the frame near the spreader full, if need be. Now, on turning the roller in the direction of the arrow, motion will be given to the apron, that will carry

the paper or cloth laid thereon under the spreader, together with as much material as can pass with the cloth under the roller, it being gauged to a certain thickness by elevating or depressing the spreader as the thickness that the paint or mastic is to be laid on.

It will be observed that as the paper is moving in one direction, the roller in contact therewith is moving in the opposite direction, so that the mastic in passing under the roller is not rolled upon, but pushed forward and upward, by the revolving motion of the roller, the result of which is that the material is spread evenly and smoothly upon the cloth or paper by the sliding and pressing action of the roller.

It will be obvious that, if the lower face of the roller revolved in the same direction that the apron moves, the mastic would be drawn in under, and rolled upon, and pressed down upon the cloth, and that in an unequal, irregular manner, according to the condition of the mastic as it lay piled up against the face of the spreader. It would also stick to the face of the roller, lifting the material from the paper or cloth, more or less, according to its adhesiveness; but by giving this reverse movement to the spreader, the action of the face of the roller upon the mastic is a sliding one, and hence there can be no sticking of the mastic to its face; hence it will be free, clean, and smooth at all times when in operation, and should any stick to the roller, it is scraped off by the scraper N.

By causing the edges of the strip of cloth or paper to be carried along under the guards J, that section covered thereby will not be impressed upon by the mastic, and hence will leave the machine with a narrow edging or border unplastered along each side of the cloth.

Though this machine is especially designed for spreading cement upon paper or cloth, to be used for roofing, it is equally well adapted to spreading the thick paint on cloth for flooring, and will therefore, applied to this branch of industry, save largely in the expense of the manufacture of that article, which, as ordinarily done, is tediously slow and expensive.

The roller or spreader may be so arranged that it may work directly upon one of the end rollers, instead of upon a solid bed-plate, as above described; however, the latter way is preferable, it being more convenient, and keeps the cloth straight under the roller.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The spreader or roller B, in combination with the apron E and rollers F F', when operating conjointly and reversely in relation to each other, for the purpose specified.

2. The guards J, springs K, as arranged, in combination with the apron E, and in relation to the frame A and spreader B, in the manner as and for the purpose set forth.

JOHN W. WHEELER.

Witnesses:

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