(No Model.)

B. F. CALDWELL & W. F. PETERSON.

MACHINE FOR PAINTING METALLIC ROOFING.

No. 381,757. Patented Apr. 24, 1888.

Fig. 1.

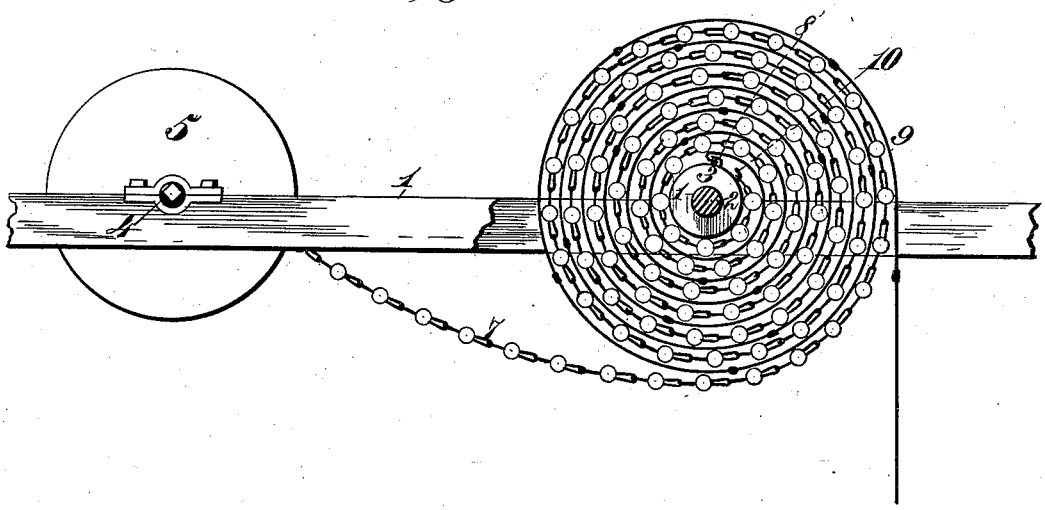
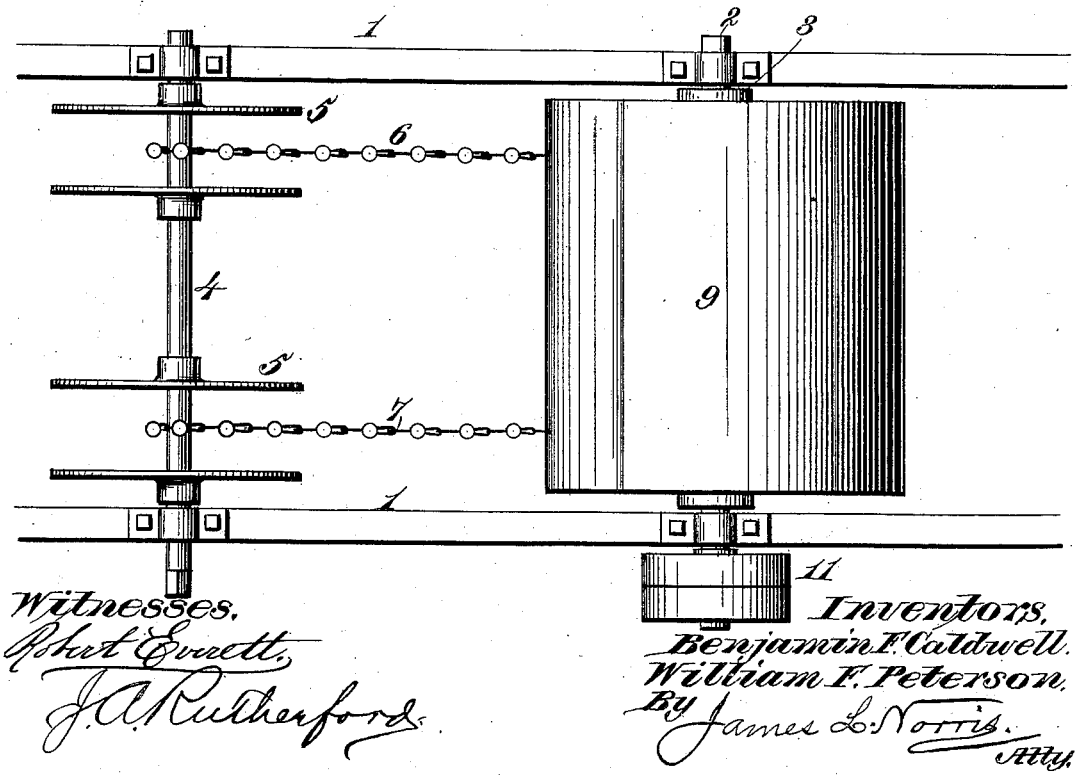


Fig. 2.



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UNITED STATES PATENT OFFICE.

BENJAMIN F. CALDWELL AND WILLIAM F. PETERSON, OF WHEELING, WEST VIRGINIA.

MACHINE FOR PAINTING METALLIC ROOFING.

SPECIFICATION forming part of Letters Patent No. 381,757, dated April 24, 1888.

Application filed November 10, 1887. Serial No. 254,819. (No model.)

To all whom it may concern:

Be it known that we, BENJAMIN F. CALDWELL and WILLIAM F. PETERSON, citizens of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented new and useful Improvements in Machines for Painting Metallic Roofing, of which the following is a specification.

Our invention relates to machines for painting metallic roofing, and the purpose thereof is to provide means for applying the coating of paint to both sides of the continuous sheet or section without the necessity of turning the same, and leave it in a suitable position for rapid drying, the injury caused by dust and dirt adhering to the wet paint, the difficulty of turning the extended section, and the necessity for greatly-extended floor-space being by our invention entirely avoided.

Metal roofing is manufactured in sheets of a given size, usually about twenty by twenty-eight inches, and a number of these sheets are joined together to form a continuous section fifty or sixty feet in length. In the manufacture of tin roofing it is necessary to unite the sheets in this manner in view of the economy of time and the convenience and facility of painting the metal, and the same may be said in regard to iron roofing. These sections have heretofore been laid upon the floor at full length and painted. After the application of paint to one side they must be turned over, after drying, to expose the opposite side, and finally must be allowed to remain until the paint is dry. The size and weight of the sections render them very unwieldy and cumbersome in turning, and the floor-space required for their accommodation is very extensive, while the dust and dirt accumulating during the time required for the drying of the paint is a constant cause of injury. To avoid these objections and effect an economy of space and time, as well as better work, we have devised the machine shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a machine for practicing our invention. Fig. 2 is a plan view of the same.

In the said drawings, the reference-numeral 1 designates any suitable frame supporting a shaft, 2, which carries a drum, 3. Within the same frame is journaled a shaft, 4, carrying spools 5, upon which we wind link chains and balls 6 and 7, respectively.

Upon the drum 3 is a lip, 8, and in using the machine we hook the bent end of the metal section 9 upon this lip. The ends of the chains are then hooked over a second lip, 10, upon the same drum, and power being applied to the shaft through a pulley, 11, the roofing-section 9 is gradually wound upon the drum with the link chains interposed between the successive coils, the chains being fed from the spools 5, as shown in the drawings. The metal may be painted and immediately rolled up; but in either case it is allowed to remain upon the drum until the paint is dry, the chains allowing a free circulation of air over every part of both surfaces.

Instead of the form of chain shown and described, any chain, cord, or wire may be used, provided it has at suitable intervals blocks, balls, or similar devices which will support the coils of roofing with sufficient space between to permit the passage of air; or ordinary chains or perforate belts might be employed without special construction, the only conditions being that they shall support the coils in such manner as to leave a space between them, and that they shall not materially obstruct the circulation of air. The chains are arranged at a little distance from the ends of the coil, as shown in Fig. 2, and we may employ two, three, or more, according to the width of the section. When wound upon a drum, the metal may be painted upon both sides at once, or it may be painted upon one side and allowed to dry before it is unrolled and painted upon the other.

We do not claim the method of painting sheet-metal roofing above disclosed, as the same forms the subject-matter of an application for Letters Patent filed by us June 2, 1887.

What we claim is—

An apparatus for drying painted sheet-metal roofing, consisting of a frame, 1, a shaft, 2, having means to engage the end of the sheets of metal, the chains engaging the shaft, and the shaft 4, having spools 5, and to which the chains are attached, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

BENJAMIN F. CALDWELL.
WILLIAM F. PETERSON.

Witnesses:
FRED GERSTING,
WILLIAM B. FISHER.