(No Model.)

H. E. WAMBOLD.

DANDY ROLL FRAME.

No. 566,825. Patented Sept. 1, 1896.

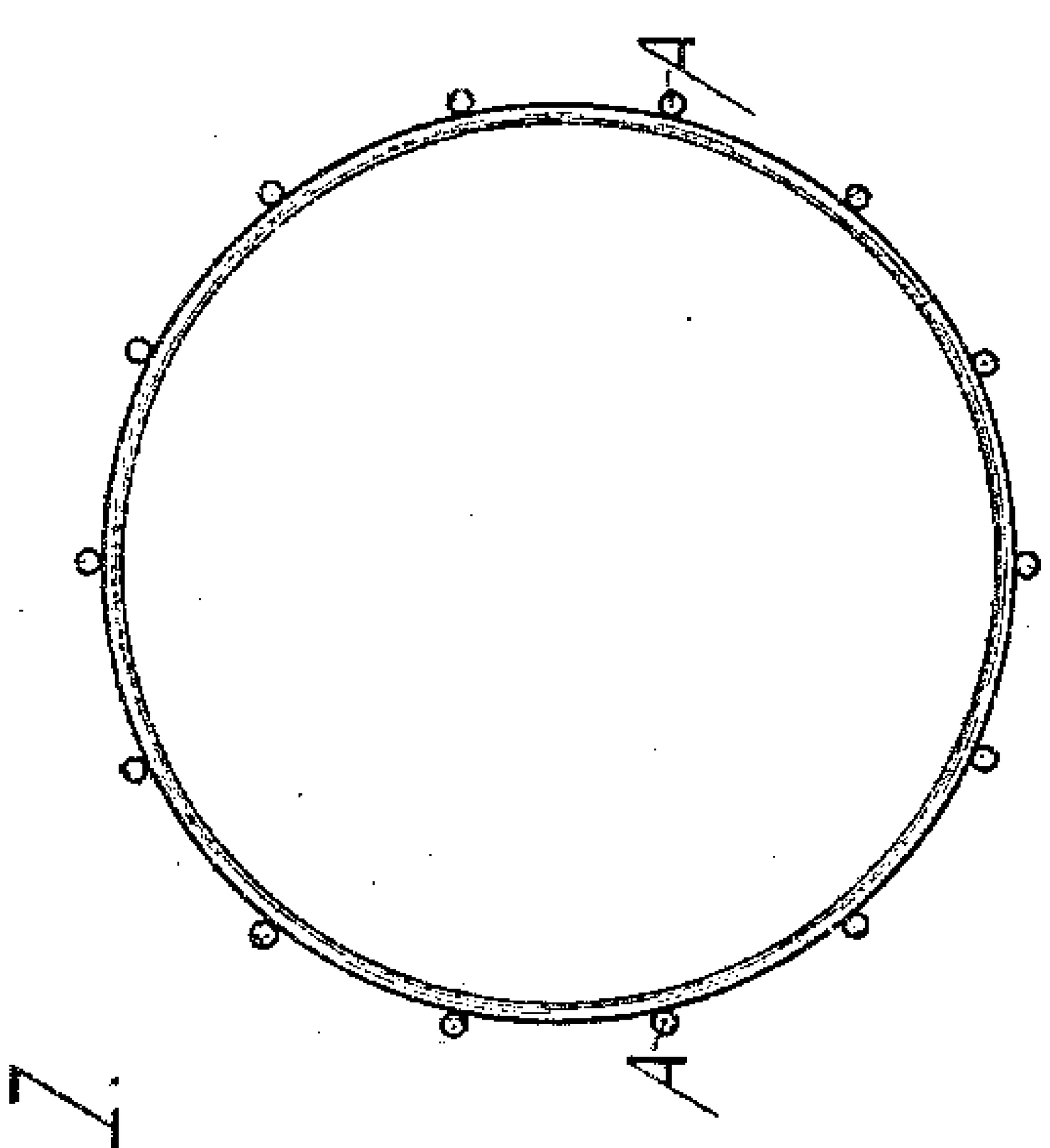

Fig. 1.

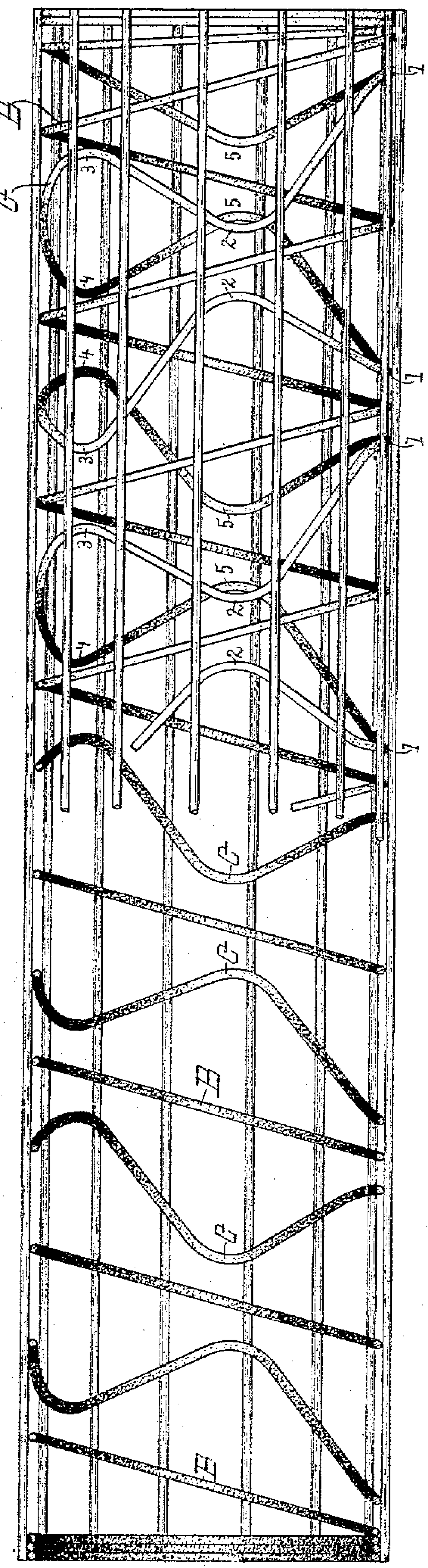

Fig. 2.

Witnesses:
F. A. W. Ro.
Winnifred Timlin.

Inventor
Harry E. Wambold
By Erwin Wheeler & Wheeler
Attorneys.

UNITED STATES PATENT OFFICE.

HARRY E. WAMBOLD, OF APPLETON, WISCONSIN.

DANDY-ROLL FRAME.

SPECIFICATION forming part of Letters Patent No. 566,825, dated September 1, 1896.

Application filed April 18, 1896. Serial No. 588,102. (No model.)

To all whom it may concern:

Be it known that I, HARRY E. WAMBOLD, a citizen of the United States, residing at Appleton, in the county of Outagamie and State of Wisconsin, have invented new and useful Improvements in Dandy-Roll Frames, of which the following is a specification.

My invention relates to improvements in that class of dandy-rolls for paper-mills in which the frame is formed of a series of parallel bars supported by a wire truss and forming a cylinder upon which is wound a covering of wire-gauze or similar material. Heretofore the supporting-truss has been formed of two lengths of wire arranged in oppositely-disposed spirals, or in irregular spirals meeting at intervals to form a strengthening-joint; but a great difficulty has been experienced in the fact that the sizing-foam which penetrates the gauze exterior is bucketed in the joints or angles of the wire truss, thus necessitating its removal by means of jets of air, steam, or other equivalent means.

The object of my invention is therefore to provide the frame with an adequate supporting-truss which will not bucket or retain the sizing, but which will permit the latter to remain at the bottom of the cylinder and cause it to gradually flow to and escape from the end thereof.

In the following description reference is had to the accompanying drawings, in which—

Figure 1 is an end view of my invention; and Fig. 2 is a side view, partly in central longitudinal section.

The covering is entirely omitted in both views, it being understood that this covering is of any ordinary material suitable for this purpose.

The frame is composed of parallel wire bars A A, arranged in cylindrical form, a spirally-arranged wire B within the cylinder, touching and soldered or otherwise united to each of the bars A A at the points of crossing, and a bent truss-wire C, also arranged spirally and following the space between the curves of the wire B, bending alternately toward the preceding and succeeding curves of the latter, but without touching it at any point. This wire C is also attached to the bars A A at the points of crossing. The wire C is preferably formed with a series of five angles or bends in each circuit of the cylinder, as shown at 1, 2, 3, 4, and 5 in Fig. 2. The angles are formed at intervals of equal length, and, there being an odd number of them, it is evident that the succeeding angles in the same longitudinal plane will alternately approach and separate from each other, thus causing the successive reaches of the wire C to coöperate with each other as well as with the spiral wire B in maintaining the cylindrical form of the roll. At each end of the roll both wires are gathered into a close coil D in an obvious manner. It will be observed that the bends in the wire C offer no obstruction to the movement of the sizing-foam, which is thus permitted to remain at the bottom of the roll and is crowded toward and discharged from the end by the wire B.

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

1. A frame for dandy-rolls, consisting in the combination of the series of parallel bars A A arranged in cylindrical form, the spiral wire B located within the cylinder and united to the bars A A at the points of crossing, and the bent truss-wire C also arranged spirally in the space between the successive curves of the wire B and alternately bent across said space without touching the wire B, said wire C being also united to the bars A A at the points of crossing, substantially as described.

2. A frame for dandy-rolls consisting in the combination of the series of parallel bars A A arranged in cylindrical form, the spiral wire B located within the cylinder and united to said bars A A at the points of crossing, and the bent truss-wire C, also arranged spirally in the space between the successive curves of the wire B, and alternately bent across said space without touching the wire B, said wire C having an odd number of bends formed at regular intervals, during each circuit of the cylinder, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

HARRY E. WAMBOLD.

Witnesses:

H. H. ROGERS,

C. H. BAAKE.