

(No Model.)

J. J. SELLERS.

DANDY ROLL.

No. 362,790.

Patented May 10, 1887.

Fig. 1.

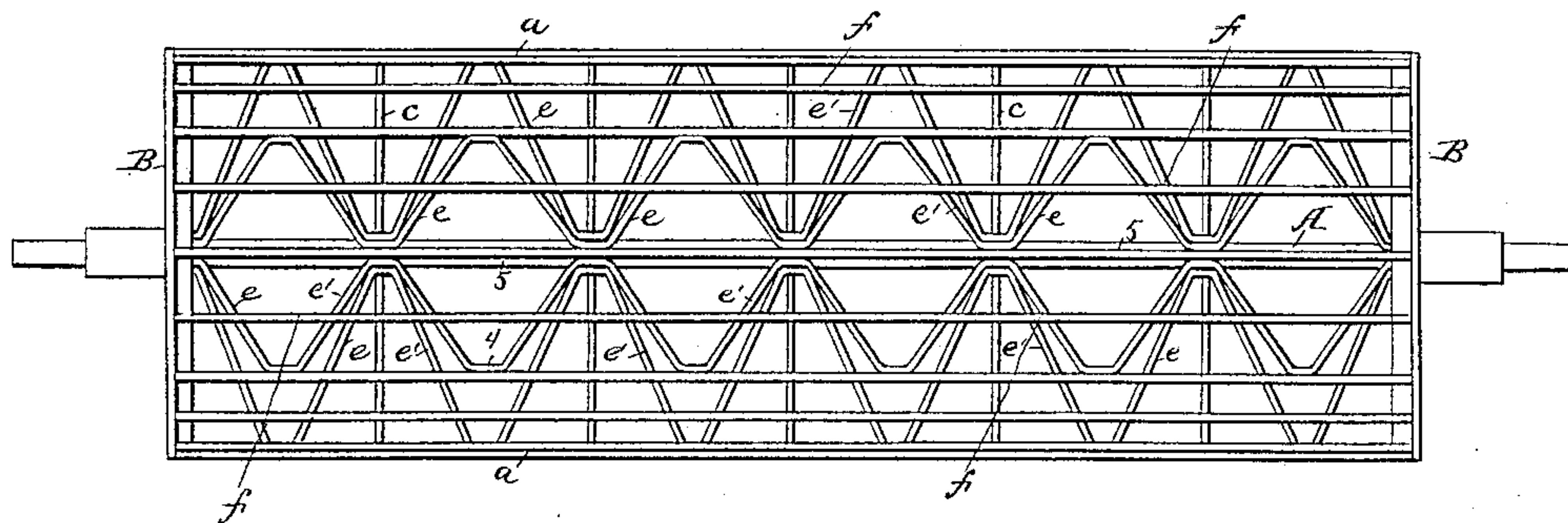


Fig. 2.

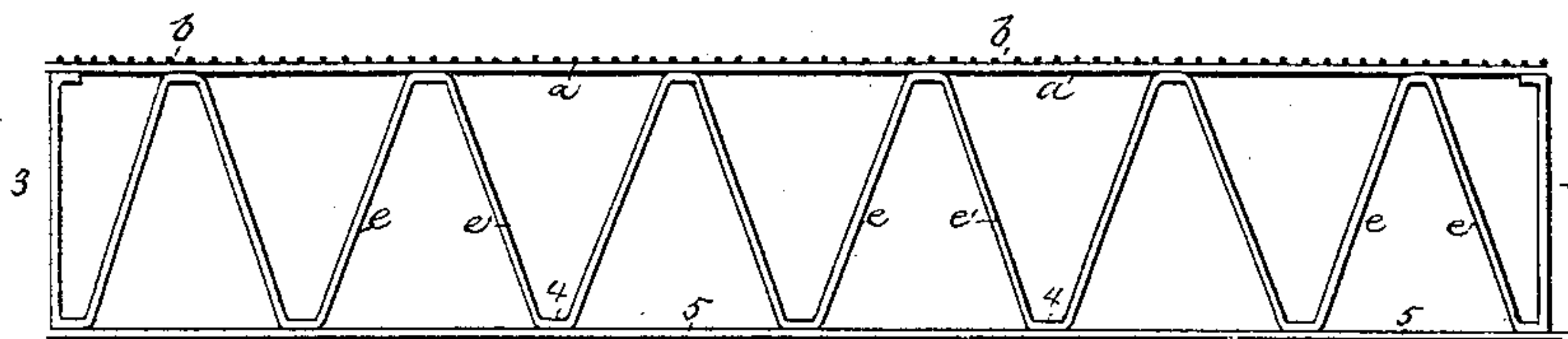
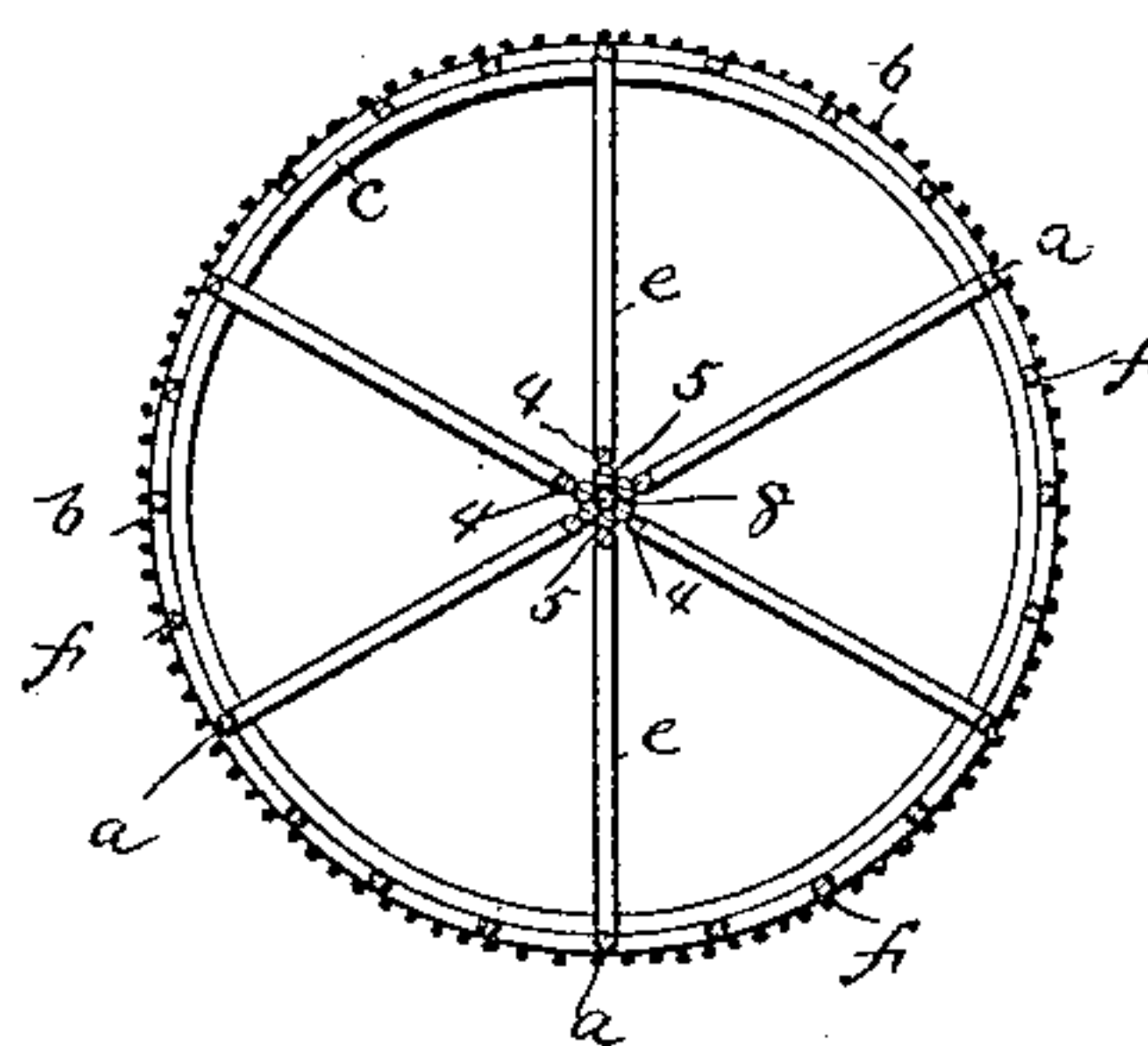


Fig. 3.



Attest:

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JOSEPH J. SELLERS, OF PHILADELPHIA, PENNSYLVANIA.

DANDY-ROLL.

SPECIFICATION forming part of Letters Patent No. 362,790, dated May 10, 1887.

Application filed July 30, 1886. Serial No. 209,569. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. SELLERS, a citizen of the United States, and a resident of Philadelphia, Philadelphia county, Pennsylvania, have invented certain new and useful Improvements in Dandy-Rolls, of which the following is a specification.

My invention relates to dandy-rolls; and it consists of a roll the frame of which is built up from a central continuous rod or shaft, heads, connecting-rods, and diagonal braces, as fully set forth hereinafter, so as to be strong, light, and rigid and free from a multiplicity of joints.

In the drawings, Figure 1 is a longitudinal external view of a dandy-roll frame embodying my improvements. Fig. 2 is a detached view of the central shaft or rod, an outer rod, and connecting-braces. Fig. 3 is a transverse section of the frame.

Dandy-rolls have heretofore been made without shafts which supported the heads, the bodies being sustained by the latter alone, but imperfectly, and being liable to sag and bend in use. Other rolls have been made without shafts, the bodies being supported and braced by diagonal braces; but such rolls have proved inefficient because of their liability to twist and their lack of strength. Other rolls have been made with ring-shaped braces and with shafts; but these are heavy and their manufacture is expensive in consequence of the number of soldered joints, and the shaft does not support the heads, but supports the braces and outside longitudinal wires, which are in turn soldered to and support the heads.

To avoid the defects specified I construct a roll, using a continuous central shaft, which, in connection with radial braces, strengthens the structure and prevents the sinking, twisting, or change of form of the cylinder.

A is the shaft; B B, the heads, which support between them a series of longitudinal rods or ribs, *a*, to which are soldered rings *c*, supporting-wires *f*, and upon the latter the wire-gauze cylinder *b* is supported in the usual manner.

The structure is braced by means of diagonal braces *e e'*, radiating from the shaft and arranged in pairs converging toward the periphery of the cylinder. These braces may be

soldered or otherwise secured to the shaft and to the rods *a*; but I prefer to form each line of braces from a single rod, as shown in Fig. 2, each end being bent up to form a radial brace, 3, and the remaining portion being bent to form pairs of converging braces *e e'* and longitudinal connecting-sections 4. The sections 4 may be soldered to the shaft, or they may constitute, with a single light rod, 5, the shaft itself, which thus consists of a series of parts forming a very light but stiff support for the frame or body of the roll.

In the actual construction of the roll, as shown, I proceed as follows: The two wires *a* 5 are arranged parallel to each other a proper distance apart, according to the size of the dandy-roll desired, and between the wires I solder a wire bent to form radial braces *e e'*, as shown. I take a number of these thus formed and solder the wire 5 to another wire, 8, and to each other in such a manner as to form the central shaft, with the braces radiating from the center at equal distances apart.

To the inside edges of the wires *a*, and between each pair of radial braces, I then solder rings *c*, to which I in turn solder the longitudinal wires *f*, forming additional supports for the wire-gauze cylinder. Thus the shaft A, in connection with the radial braces, the rings *c*, and the longitudinal wires *f*, supports the heads B B, which are securely fixed thereto, thus forming a frame for the support of the wire-cloth. The frame thus constructed has but comparatively few joints, it is light in weight, the braces prevent any sagging of the body, while the rods support the gauze-cylinder, and the shaft to which all the braces and the heads are connected effectually prevents the body from twisting.

Without limiting myself to the precise construction and arrangement of parts shown, I claim—

1. A dandy-roll frame consisting of a central rod or shaft, heads secured to the shaft, a series of rods, each bent to form a series of pairs of diagonal braces, *e e'*, and connected with the shaft, rings *c*, and longitudinal rods connected to the braces and to the rings and heads, substantially as described.

2. The combination, in a dandy-roll, of a central continuous shaft, heads, longitudinal

ribs extending between the heads, and radial diagonal braces connecting the shaft and rods, substantially as described.

3. The combination of the central rod, 5,
5 the series of rods, each bent to form a series of radial braces, *e e'*, and longitudinal connecting-sections 4, the latter and the rod constituting a compound shaft, and heads and connecting-ribs, substantially as described.
- 10 4. The combination of the shaft, heads, ribs, and series of rods, each bent to form radial

braces 3 and radial and diagonal braces *e e'*, and all secured to the shaft and ribs, substantially as described.

In testimony whereof I have signed my name 15
to this specification in the presence of two subscribing witnesses.

JOSEPH J. SELLERS.

Witnesses:

WM. H. CHILDS,
EDGAR ARMENT.