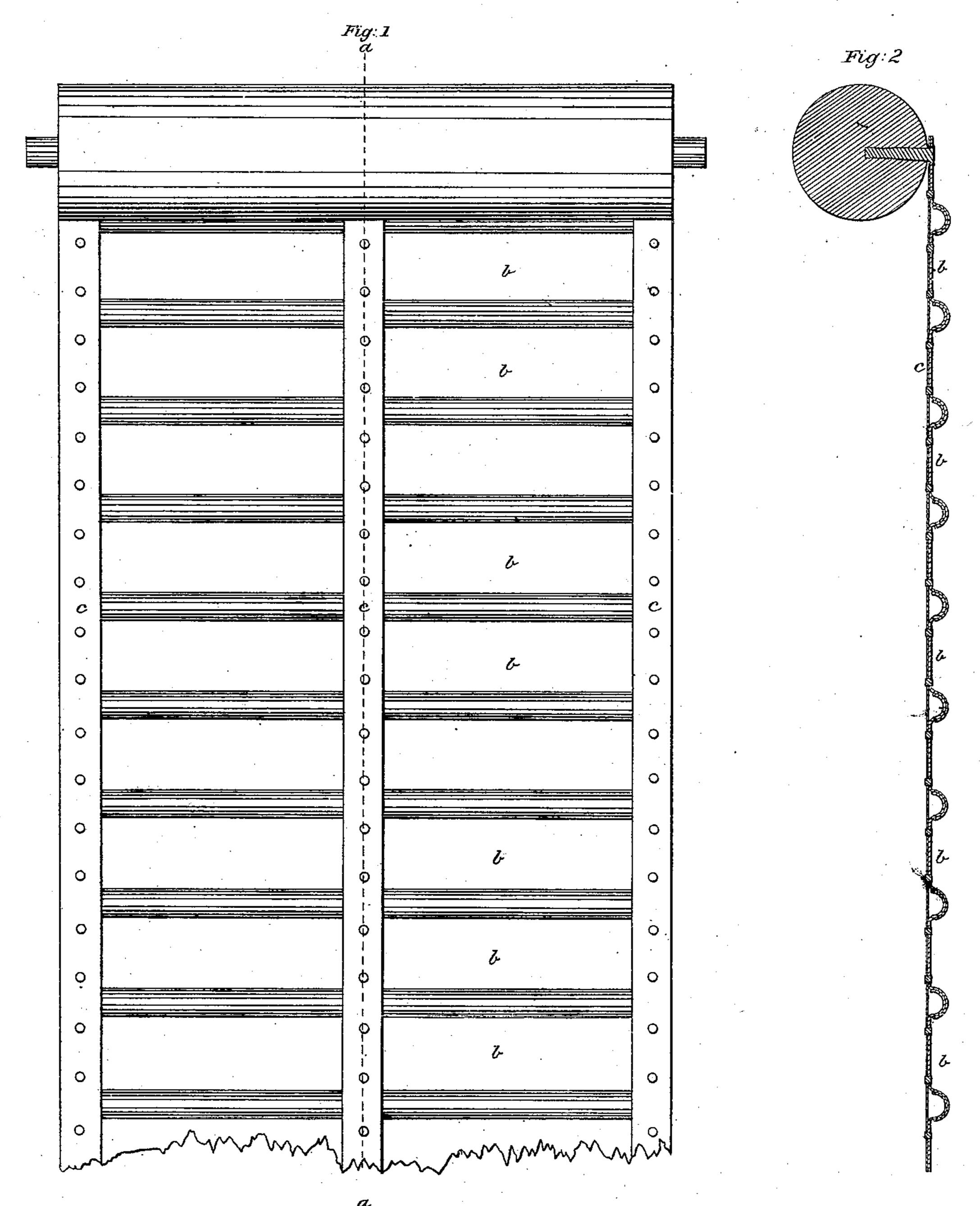
M. M. Congl.,

Mindow Shuller,

J/20,630,

Patented June 22, 1858.



UNITED STATES PATENT OFFICE.

W. W. CORNELL, OF NEW YORK, N. Y.

METALLIC ROLLING SHUTTER.

Specification of Letters Patent No. 20,630, dated June 22, 1858.

To all whom it may concern:

Be it known that I, WILLIAM W. CORNELL, of the city, county, and State of New York, have invented a new and useful Improvement in that Description of Rolling Shutters which are Composed of United Metallic Sections; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, Figure 1 being a view of the inner side of one of my improved shutters, and Fig. 2 a section in the line a a of Fig. 1.

My improved rolling metallic shutter is composed of a series of sections b, b, of sheetmetal whose edges are first bent into the forms of corresponding segments of circles, or any other suitable matching shape, and then combined with each other by means of a sufficient number of elastic metallic strips c, c, secured to the inner surfaces of said sections by means of rivets, or their equivalents, substantially as represented in the accompanying drawings.

The inner surface of my improved rolling shutter, it will be perceived, has no projections, and consequently it can be made to bear closely and smoothly against the straight faces of suitable guiding bars and rabbets, and can also be evenly wound upon a roller.

The overlapping curved edges of the sections b, b, serve to greatly stiffen said sections and also serve to prevent the possibility of inserting any cutting instrument from the outer side of the shutter through any of its joints for the purpose of cutting off or injuring the elastic strips c, c, which serve to combine the aforesaid shutter sections with each other.

I am aware that John B. Cornell has obtained a patent for a rolling metallic shutter composed of sections whose shape corresponds with that generally given to the sections of my improved shutter,—but the sections of the said patented shutter are combined with each other by means of a series of jointed strips, whereas, the sections of my improved shutter are combined with each other by means of a series of elastic metallic 50 strips which are secured thereto in any suitable manner.

The following are some of the advantages possessed by my improved shutters when compared with shutters whose respective sections are combined with each other by means of hinge-joints, or jointed strips. First, there is a considerable saving of expense in the matter of the first cost of my said improved shutters. Second, there is perfect 60 freedom from all danger of derangement of joints and joint-pins in the use of my improved shutters. Third, there is a much freer and easier adjustment of the sections of my improved shutter in winding and un-65 winding the same, which necessarily adds considerably to the durability of said shutter.

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

My improved sectional metallic shutter 70 composed of a series of sections whose edges are first brought to the proper shape and then combined with each other by securing said sections to elastic metallic strips substantially as herein set forth.

WILLIAM W. CORNELL.

Witnesses:

C. H. FIELD,
BIRDSALL CORNELL.