2 Sheets--Sheet 1.

DANIEL M. SPROGLE.

Improvement in Kilns for the Manufacture of Artificial Stone.

No. 120,834. Patented Nov. 14, 1871.

Fig. 1

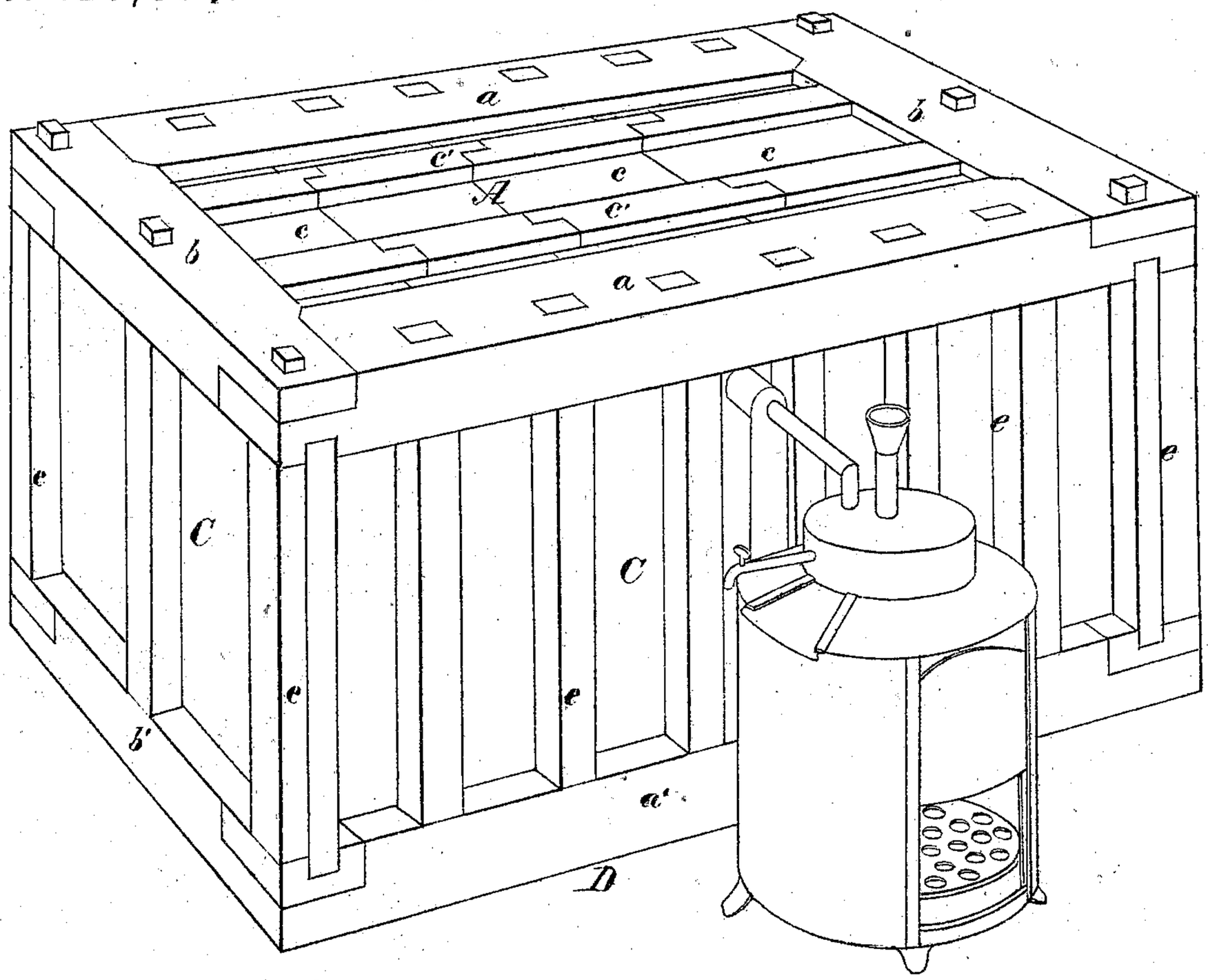
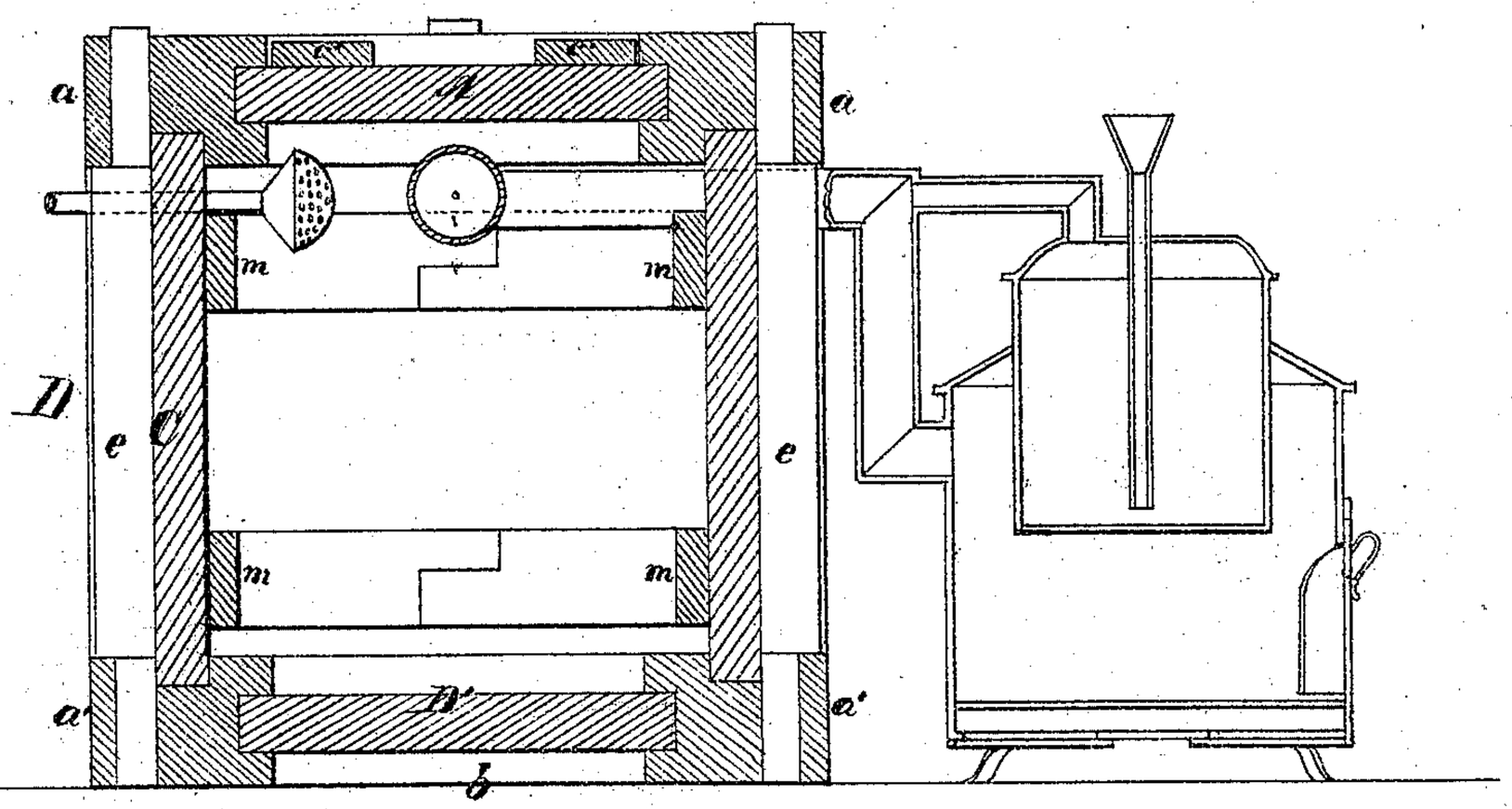


Fig. 2



Witnesses.
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2 Sheets--Sheet 2.

DANIEL M. SPROGLE.

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Fig. 3

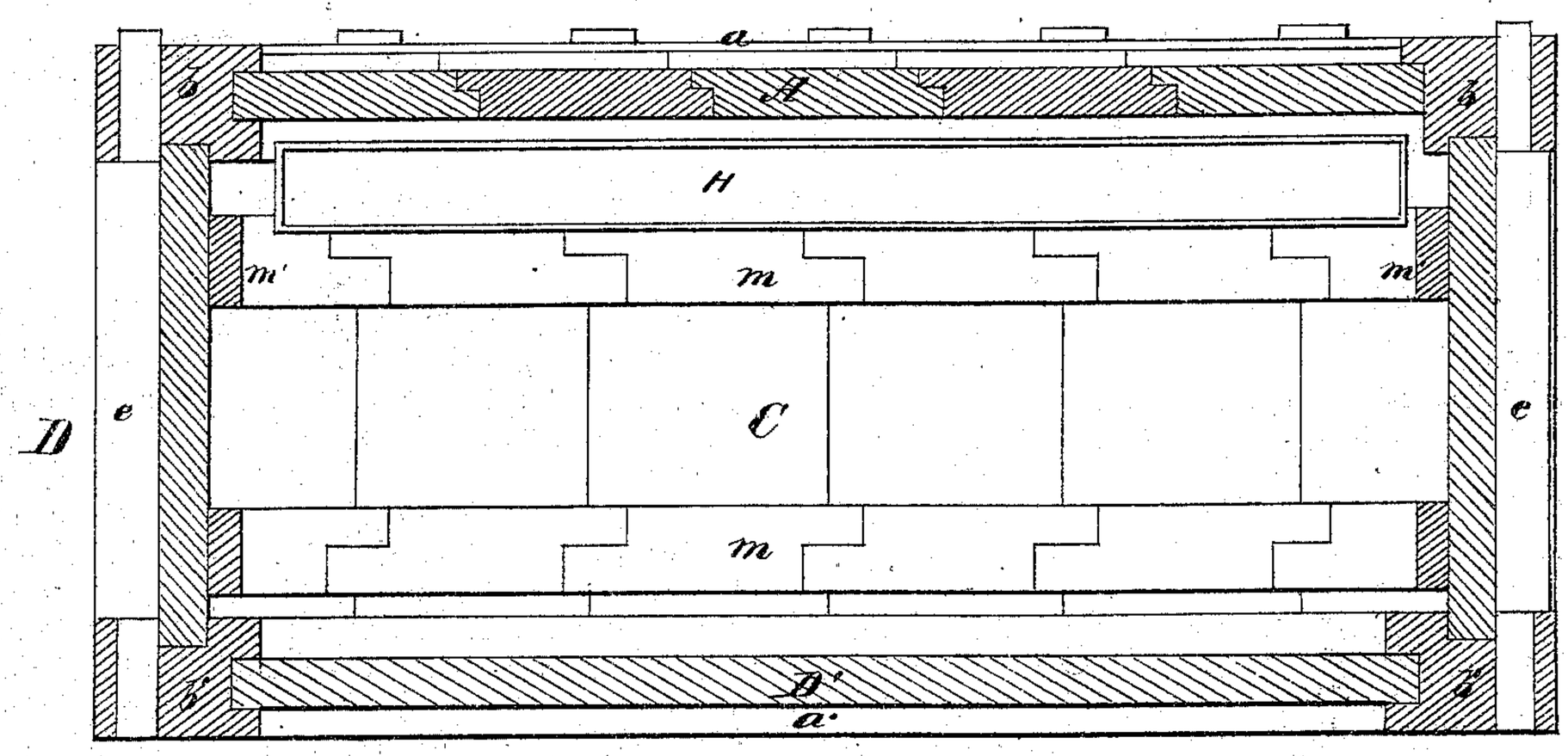
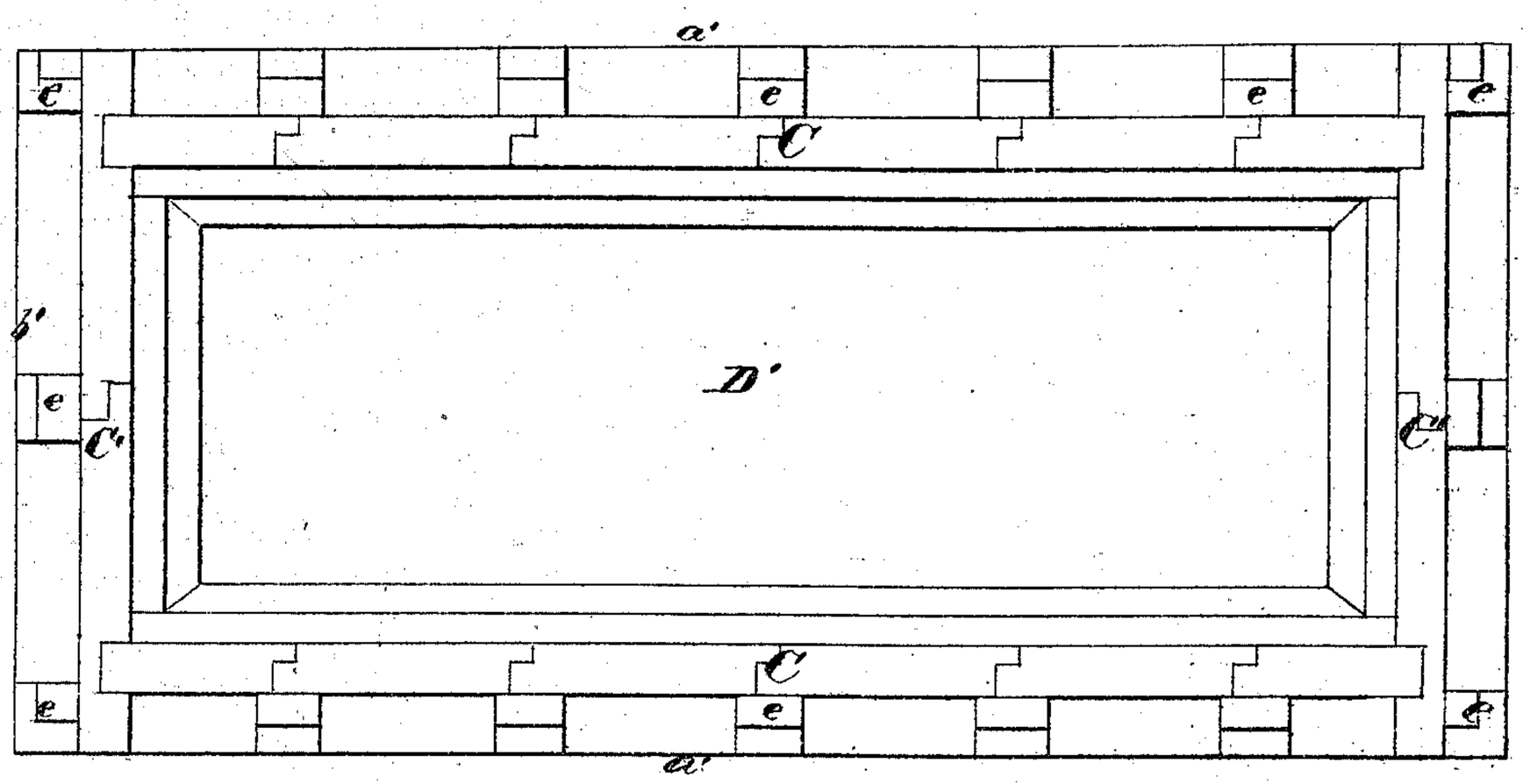


Fig. 4



Witnesses.
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UNITED STATES PATENT OFFICE.

DANIEL M. SPROGLE, OF ANNAPOLIS, MARYLAND.

IMPROVEMENT IN KILNS FOR THE MANUFACTURE OF ARTIFICIAL STONE.

Specification forming part of Letters Patent No. 120,834, dated November 14, 1871.

To all whom it may concern:

Be it known that I, DANIEL M. SPROGLE, of Annapolis, in the county of Anne Arundel and State of Maryland, have invented a new and Improved Kiln to be used in the Manufacture of Artificial Stone; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1, Plate 1, is a perspective view of my improved kiln, and also a steam and carbonic acid gas-generator which is used in combination therewith. Fig. 2, Plate 1, is a section, taken vertically and transversely through the improved kiln and through the generator. Fig. 3, Plate 2, is a section, taken longitudinally and vertically through the center of the kiln. Fig. 4, Plate 2, is a top view of the kiln with the cover and capping timbers removed.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improved portable kiln which is designed for containing cement-molds to be treated to the action of carbonic-acid and steam, in the manufacture or curing of artificial stone.

In an application for Letters Patent, marked case A, and bearing even date with the filing of this, I have described, in connection with my kiln, a generator for the production of carbonic-acid gas and steam. I do not claim this generator under this application, but confine myself to the kiln, which I will now proceed to describe.

In the accompanying drawing, D represents a kiln, which is made of a rectangular form, of suitable capacity, and which is so constructed that it can be readily taken down and erected again. The object of so constructing the kiln is that the molded articles, while in a green state, may be arranged in a pile without the necessity of lifting them over the top of the kiln, which would be very liable to render them untrue, especially long tubular work. I therefore construct a kiln which can be readily built up about the material after it is piled up. The kiln is composed of sills *a′ b′* and a flooring, D′, which latter are fitted into grooves formed into the sill-timbers, as shown in Figs. 2 and 3. The sill-timbers are also grooved for receiving the side and end housings C C′ which are composed of boards of suitable widths rabbeted together so as to make close joints, as shown in the drawing. The side and end timbers, and also the top of the kiln, are sustained by means of uprights *e* which are mortised into the sill-timbers *a′ b′* and also into the capping-timbers *a b*. The capping-timbers are halved and lapped at their joints and locked together thereat by means of the tenons on the corner uprights *e*, and these capping-timbers are grooved on their bottom sides for receiving the upper ends of the side and end housings C C′, and on their inner edges for receiving the covering-boards A, as shown in Figs. 2 and 3. The side and end housings and the covering-boards are made up of sections, jointed together by rabbets, and strengthened by means of inside battens. It will be seen from the above description that the several parts composing the kiln are so constructed and united together that by removing the cover and capping-timbers the structure can be readily taken down. It can be erected with the same facility.

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

The portable sectional kiln, constructed substantially in the manner and for the purpose set forth.

DANIEL M. SPROGLE.

J. N. CAMPBELL,
R. T. CAMPBELL.

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