

(No Model.)

F. H. SCHWEIGER.
METHOD OF CASTING CHAINS.

No. 246,347.

Patented Aug. 30, 1881.

Fig:1.

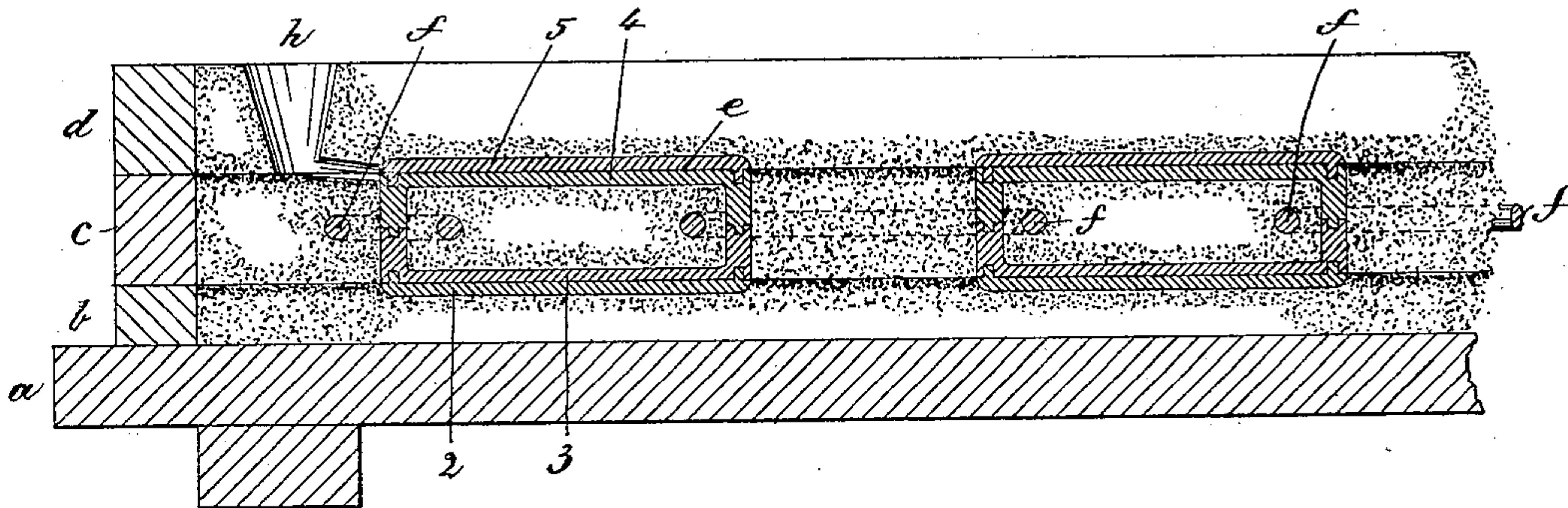
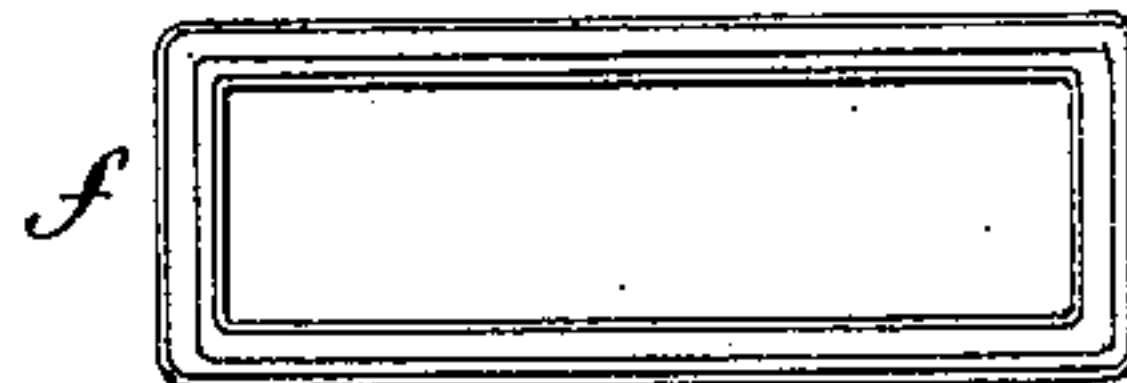


Fig:2.



Witnesses.

L. F. Connor.
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Inventor.

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by Crosby & Gregory Attys

UNITED STATES PATENT OFFICE.

FREDERICK H. SCHWEIGER, OF BROOKLYN, ASSIGNOR OF ONE-HALF TO
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METHOD OF CASTING CHAINS.

SPECIFICATION forming part of Letters Patent No. 246,347, dated August 30, 1881.

Application filed July 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK H. SCHWEIGER, of Brooklyn, Kings county, State of New York, have invented an Improvement in the
5 Method of Casting Chains, of which the following description, in connection with the accompanying drawings, is a specification.

My invention relates to an improved method of casting chains, whereby the same may be
10 made rapidly and economically.

In the practice of my invention I first cast a number of links separately, and when molded into the loam of the flask cast other links through and about and to connect them all as
15 one chain.

Figure 1 represents, in vertical longitudinal section, part of a three-part molding-flask containing some cast links connected by a divided pattern-link, the latter being also in section;
20 and Fig. 2 shows one of the cast-metal links removed from the flask.

The bottom board, *a*, and parts *b c d* of the flask are as usual. The pattern-link *e* is composed of four pieces, 2 3 4 5, suitably connected together by dowel-pins, as shown at
25 the ends of the pattern-links in Fig. 1, in order that it may be separated in line with the partings of the flask, as under such condition the impression in the loam can be made with
30 greater accuracy.

The links *f* are cast links, which it is desired to connect in series by other links to be cast in the spaces formed by the divided pattern-link *e*. This I do in the following manner:
35 I first stand the parts 2 3 of the pattern-link in the loam of the part *b* of the flask, packing it to the level of the top of part *b*, when I apply dividing-sand; then apply part *c* of the flask, partially fill it with loam, place the cast-metal links therein about the upwardly-extended parts of the link-pattern, apply parts
40

4 5 of the link-pattern, as in Fig. 1, and fill and tamp the flask part *c*, and apply dividing-sand; then apply the part *d* of the flask and fill it with loam, tamp it down, and make run-
45 holes *h*, to communicate with each pattern-link. After this the three-part flask will be separated and the pattern-link be withdrawn in pieces, when the flask will be again put together, as in Fig. 1, the pattern-link being, however,
50 omitted, and the hole previously occupied by it will be filled with molten metal, forming a link the counterpart of the pattern-link, which will connect with it two cast-metal links, *f*, previously made, and then contained in the
55 loam of the part *c* of the flask. In this way I am enabled to cheaply produce a chain all the links of which are of solid cast metal.

The shapes of the links and pattern-links may be variously modified without departing
60 from my invention, as may be the number of sections into which it is divided.

I claim—

That improvement in the art or method of producing cast-metal chains which consists in
65 the following steps, viz: forming a part of the mold for each link of a series, embedding in the mold material a series of cast links so that each link will surround a portion of two of such mold portions, then molding the remain-
70 der of the series of link-molds, removing the pattern, and finally pouring the metal, thus casting a series of links which inclose within them as one chain the previously-made metal links, substantially as described. 75

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

FREDERICK H. SCHWEIGER.

Witnesses:

E. T. THOMAS,

JOHN E. HOGAN.