

Construction of Soap Frames.

Patented July 11, 1865.

This technical drawing illustrates a mechanical assembly, possibly a pump or engine component, featuring a central vertical shaft. The shaft is equipped with several gears and levers, labeled with letters 'a' through 'z' and 'A' through 'I'. The device is mounted on a base and has a complex arrangement of springs and levers on either side of the central shaft. The drawing is a detailed cross-section or side view, showing the internal components and their relative positions. The central shaft has a series of gears and levers attached to it, with labels 'a' through 'z' indicating specific parts. The levers are connected to a series of springs, which are labeled 'A' through 'I'. The entire assembly is mounted on a base, which is shown in a simplified manner at the bottom of the drawing.

Witnesses
J. M. Broughton.
C. L. Schliff

Twentor
D. H. Wilaker
By M. M. M. M.
Atty.

UNITED STATES PATENT OFFICE.

DANIEL WHITAKER, OF ROXBURY, MASSACHUSETTS.

IMPROVEMENT IN THE CONSTRUCTION OF SOAP-FRAMES.

Specification forming part of Letters Patent No. 48,753, dated July 11, 1865.

To all whom it may concern:

Be it known that I, DANIEL WHITAKER, of Roxbury, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Soap-Frames; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a certain new and useful improvement in the construction of soap-frames, so called by manufacturers of soap, the object of which is to form the frame of such a material and in such a manner that it will neither spring, "buckle," nor twist from the weight and heat of the soap contained therein, and whereby the usual cumbersome and complicated arrangement of supports for the frames can be entirely dispensed with, thus facilitating the removal of the soap therefrom after it has been sufficiently cooled. These results are secured by my improvement, which consists in forming the upright sides composing the soap-frame in two parts or sections, joined together at their contiguous edges by means of a series of pins and keys, or in any other proper manner, so as to be easily detached from each other when desired to remove the soap contained therein, and in attaching to and upon the side plates thereof in the direction of their length and for their entire height, by means of rivets, an outside plate of wrought-iron, made in a corrugated form, by which great stiffness and strength are imparted thereto.

Having thus generally stated the objects and principles of my improvement, I will now proceed to describe the same in detail, reference being had to the accompanying plate of drawings, of which—

Figure 1 is an end view of a soap-frame made according to my improvement, and Fig. 2 a plan or top view of the same.

a a in the drawings represent the soap-frame, made of a plate of wrought-iron of sufficient thickness and in a rectangular shape, open at both ends, and secured at its lower end by pins *b b* and keys *c c* to and upon a bottom board, *d*, or to any suitable platform or base for the same. The frame *a a* is divided at its ends *f f*

and in the direction of its height into two parts or sections, *g* and *h*, to the contiguous edges of which flange-pieces *l l* are secured by rivets or in any other proper manner, these flanges being securely held together when the frame is to be set up for use by and between the heads *m m* of a series of bolts or pins, *n n*, passed through suitable apertures therefor in the same, and the tapering key-pins *o o*, driven into the pins upon the opposite side of the flanges, by removing which key-pins from the bolts the two parts or sections composing the frame can be easily and readily detached from each other, as is evident.

To and upon the side plate, *p p*, of each part or section of the frame, and in the direction of their length and for their entire height, I attach another and outside plate, *q*, of wrought-iron, bent or struck up with a series of corrugations or ribs, *r r*, of any desired number and shape, and at any suitable distance apart, which corrugated or ribbed plate, at each and every part of the same in direct contact with the frame, is secured thereto by means of rivets or in any other proper manner, to tightly hold it thereon.

By securing to each side plate of the soap-frame, and for its entire length and height, a corrugated wrought-iron plate or sheet, as described, it is evident that great strength and stiffness are imparted thereto without materially increasing their weight or rendering them bulky and inconvenient for handling; and that, furthermore, the use of props and stays, as has heretofore been the case when wooden or wrought-iron frames were employed, is entirely dispensed with, sufficient strength being given by the corrugated plates to resist the pressure exerted by the soap placed within the frame.

The many advantages of the above-described mode of strengthening soap-frames over the ordinary frames heretofore in use are evident to all conversant therewith, and therefore need no particular mention herein, it being sufficient to state that the separate parts of the frame can be so made as to be put together with the utmost facility and with no especial regard to their having been made one for the other.

The thickness of the plates composing the frame may be varied at pleasure, and the cor-

rugations may be of various widths and sizes, without departing from the principles of the present invention, as hereinbefore stated.

I claim, and desire to secure by Letters Patent, as a new and improved article of manufacture—

A soap-frame made of wrought-iron, having

its side plates corrugated and formed in two parts or sections, substantially in the manner described, and for the purposes specified.

DANIEL WHITAKER.

Witnesses:

A. GRESHAM,

J. M. GILBERT.