

Francis Curtis.
Manufacture of Articles of Ornament.

110833

PATENTED JAN 10 1871

Fig. 1.

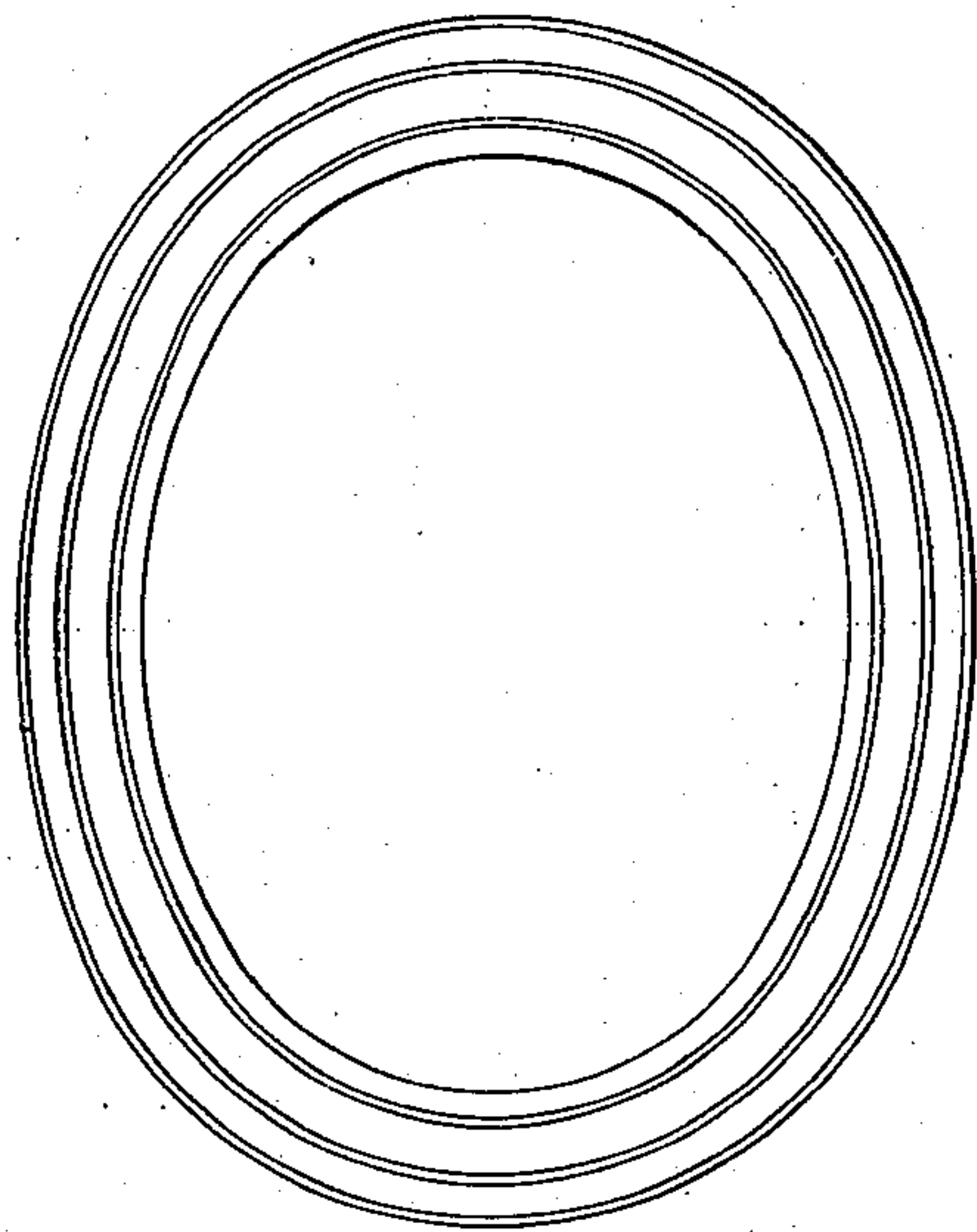
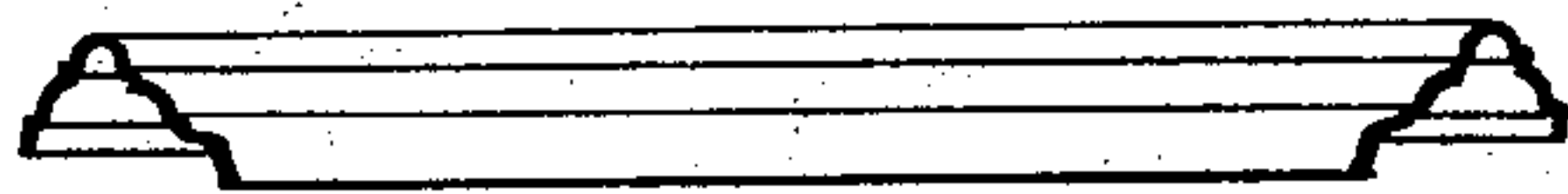


Fig. 2.



WITNESSES.

Charles H. Mills

Chas. E. Dawson

INVENTOR.

Francis Curtis

United States Patent Office.

FRANCIS CURTIS, OF FOXBOROUGH, MASSACHUSETTS, ASSIGNOR TO
DAVID SCRYMGEOUR, OF SAME PLACE.

Letters Patent No. 110,833, dated January 10, 1871.

IMPROVEMENT IN THE MANUFACTURE OF ARTICLES FROM PAPER PULP.

The Schedule referred to in these Letters Patent and making part of the same.

To all to whom these presents shall come:

Be it known that I, FRANCIS CURTIS, of Foxborough, in the county of Norfolk and State of Massachusetts, have made an invention of a new and useful Manufacture from Paper or Pulp produced from animal or vegetable fiber; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawing making part of this specification, and in which—

Figure 1 is an outer face representation, and

Figure 2 a section of a picture-frame manufactured according to my invention.

The invention consists in making a frame for pictures, glasses, or other ornamental or useful purposes to which our invention is applicable, the material being animal or vegetable fiber, or both combined.

The process by which the frames are made is in part as follows:

The fiber, which may be cotton, linen, jute, manilla, hemp, flax, wood, wool, leather, or other animal or vegetable fiber, is subjected to a picking or cleaning process, and then reduced in a cutter or picker, or other suitable machine, and boiled in alkali from six to forty-eight hours, until it is sufficiently softened for the purpose.

The fiber may also be used in the natural state without boiling.

The stock fiber is now to be reduced to the proper consistency, by being cut, broken, or separated, so that the fibers will lie together, and the whole mass be formed into a pulpy condition, so that it may be formed into a thick felt and shaped into the mold or die, or it may be deposited onto the mold or die in a pulpy state, mixed with water.

The fiber may be reduced in an ordinary paper engine, or by any other process suitable; or it may be also formed into the body or felt upon a paper machine, and used in the form of a thick paper felt; or it may be formed upon a wire gauze or other perforated surface, from which the water has been pressed or drawn through the fibers by means of suction produced by hydraulic, atmospheric, or steam pressure.

Having thus reduced the fiber to the proper condition, I now proceed to make the frame or other device.

I prepare a die from or in imitation of the article I wish to produce, either by electrotyping or otherwise. I now take the fiber, either in the felted form or in the pulpy state, as I may prefer, and form or mold it into the mold or die, and by manipulation and pressure I force the fiber into the mold until it receives the perfect impression and is a perfect *fac simile*. This is now to be dried, and, if necessary, when dry, to be subjected to heavy pressure until it is in perfect form and very smooth, and capable of receiving a very smooth surface.

The frame is now to be water-proofed, which may be done with shellac or varnish, or by any of the processes by which paper is water-proofed, and is then ready to be painted, gilded, flocked, or ornamented in any desired manner.

The advantages which ornaments of this class possess are—

First, cheapness, as I believe they can be produced more cheaply than by any other process, as one die or mold will produce an unlimited number at the rate of three to six per minute.

Second, the ornaments are much lighter, and will not crack nor shrink by exposure to changes of the atmosphere, and are very tough and durable.

Third, they are capable of being produced in an infinite variety, and of the most beautiful patterns and designs, for excelling plaster, wood, or any of the materials now in use, which are all more or less effected by the atmosphere and moisture and are easily broken.

There are many purposes to which my invention can be applied, such as brackets, ornaments for furniture, carvings, moldings, car trimmings, vases, flower-pots, cuspadors, table-mats, trays, book-covers, &c.

Claim.

I claim—

The herein-described manufacture of articles of ornament.

FRANCIS CURTIS.

Witnesses:

CHAS. E. DAMON,
WM. BUSTEED.