F. Grosjean,

Spoon.

No. 33,247. Patented Sep. 10, 1861.

Fig. 1.

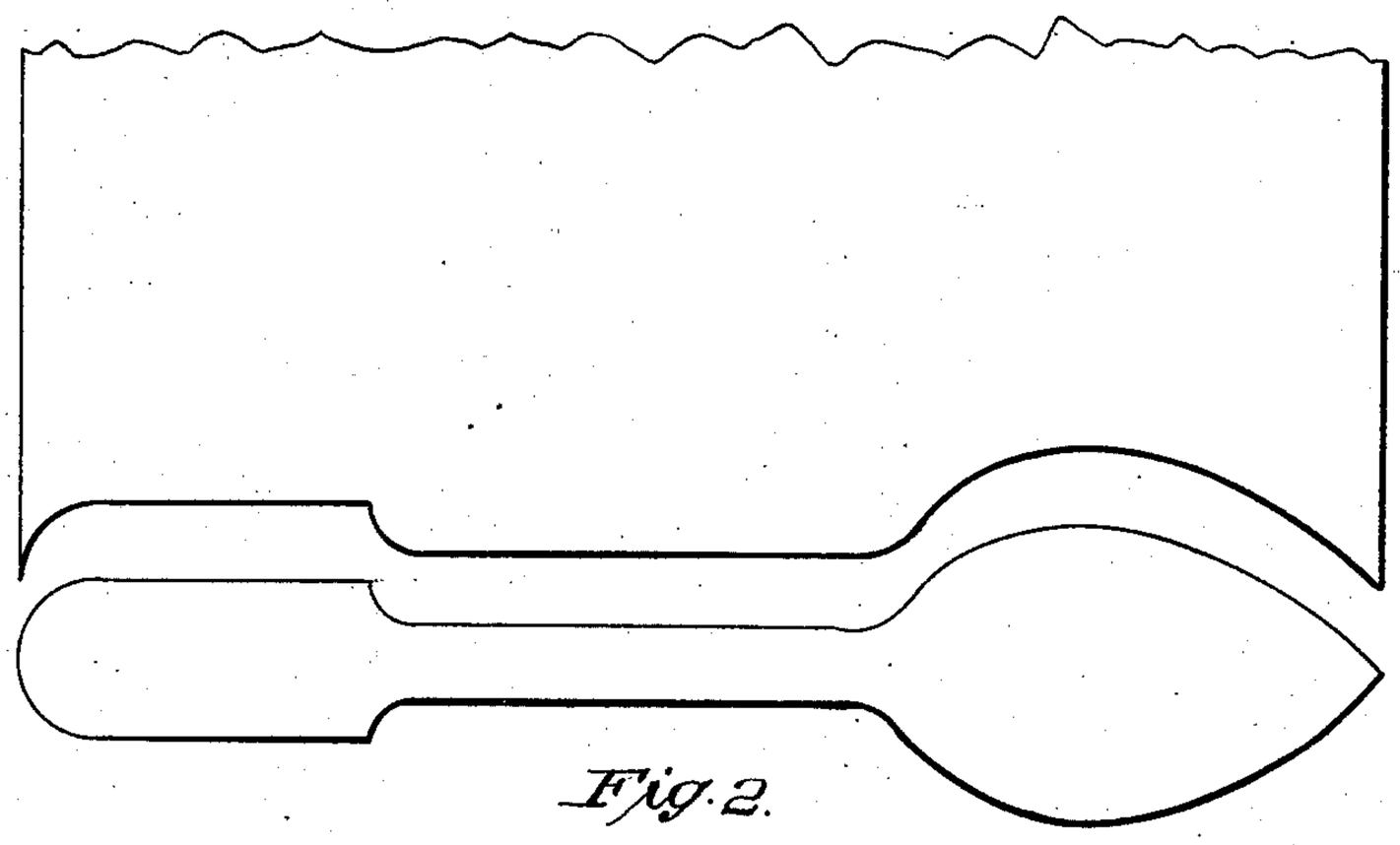

Fig. 2.

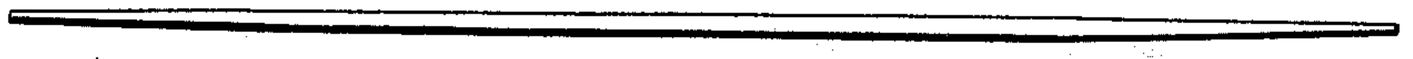

Fig. 3.

Witnesses.

Nelson Sizer

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By Thos. G. Orrow

Atty

UNITED STATES PATENT OFFICE.

FLORIAN GROSJEAN, OF NEW YORK, N. Y.

PROCESS OF MAKING IRON SPOONS.

Specification forming part of Letters Patent No. **33,247**, dated September 10, 1861.

To all whom it may concern:

Be it known that I, FLORIAN GROSJEAN, of New York, in the county of New York and State of New York, have invented a new and Improved Process for Making Iron Spoons, which I have described in the following specification and illustrated in its accompanying drawings with sufficient clearness to enable competent and skillful workmen in the arts to which it pertains or is most nearly allied to use my invention.

In the construction of spoons it is well known that a much greater thickness is required in the middle of the handle than at its end or the end of the bowl of the spoon. To give the proper proportion, each spoon separately has been forged or hammered down to the required thinness at the ends. The labor involved in this operation makes the spoons somewhat expensive and amounts in the aggregate to a large item in the cost of manufacture.

My process of making these spoons consists in first rolling a bar or plate of iron of the proper width for the length of the spoons required and thin it at its edges, with sufficient substance in the middle for the handle of the spoon, and then cutting out the spoons crosswise of the bar or plate, after which they are bent into shape and the bowl formed by means of swages properly constructed for the purpose.

The accompanying drawings illustrate my invention, as follows:

Figure 1 is a plan of a remnant of a bar or plate of iron rolled to the required width to form the spoons, the end toward the bottom of the page being shown as it would appear after a spoon had been cut from it.

Fig. 2 represents a piece of metal cut out to form a spoon, and is a plan of it. By a comparison of this figure with the one above the way in which the spoons are taken from the bar will be obvious.

Fig. 3 is an end view of the bar or plate from which the spoons are cut. It will be observed by an inspection of this last figure that the edges of the bar are much thinner than the middle, it being tapered from about the place where the root of the bowl would come to the edge, each edge of the bar being tapered or made thinner in the same way, thus giving less thickness in the broad part of the handle as well as in the bowl. For the purpose of economy in the working of the metal the bar is turned at each cut, so as to take the bowl of the spoon alternately from the opposite edges of the bar; or this necessity may be obviated by making the dies double, so as to cut two spoons at once. There may, however, be some objections to this last arrangement which would interfere with its practicability. After the pieces to form the spoons have been cut from the bar they are struck into shape by swages and the edges trimmed with a file or otherwise, when they are ready to be finished by the ordinary process of tinning.

The spoons thus made have a much more uniform surface than those manufactured in the ordinary way, presenting none of the hammer-marks which so disfigure the ordinary article, as no hammer is used, the bar being formed entirely by rollers, and while a much more neat and smooth article is made by this process the expense of manufacture is thereby very greatly reduced.

Having thus fully described my said invention, I claim—

The process or mode herein described of making iron spoons by first forming a bar or plate of iron tapered at the edges, as described and shown, and afterward cutting the spoons therefrom in the manner set forth.

F. GROSJEAN.

Witnesses:

ISAAC H. HOW,

THOS. P. HOW.