(No Model.)

T. P. TAYLOR.

MANUFACTURE OF BASE BALLS.

No. 277,809. Patented May 15, 1883.

Fig. 1.

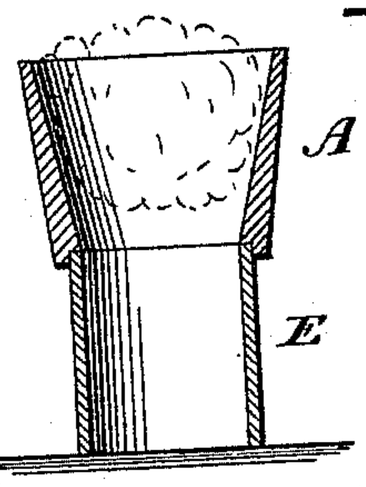


Fig. 2.

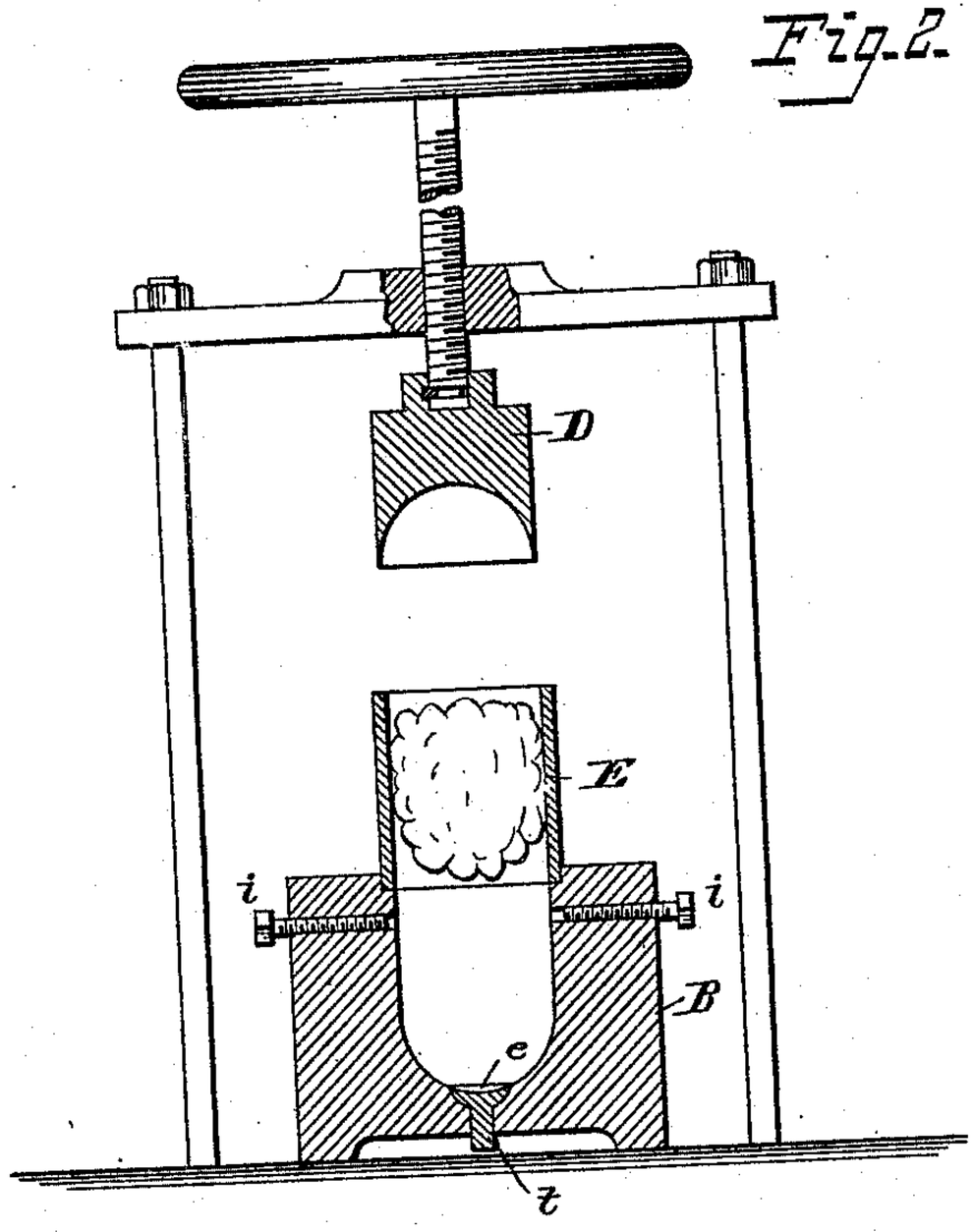
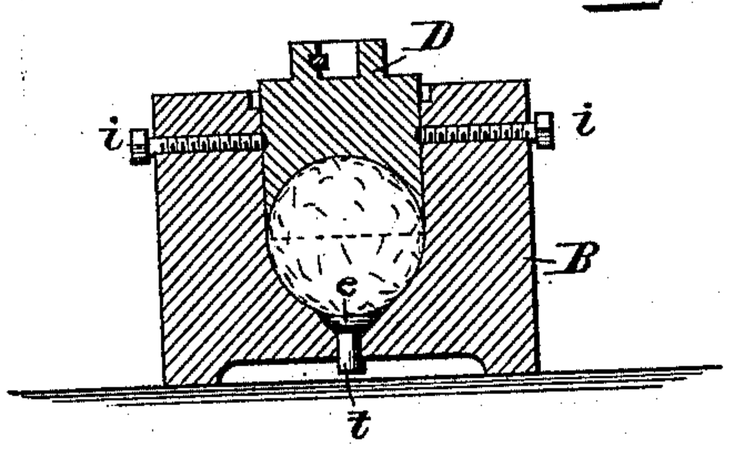


Fig. 3.



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UNITED STATES PATENT OFFICE.

THOMAS P. TAYLOR, OF BRIDGEPORT, CONNECTICUT.

MANUFACTURE OF BASE-BALLS.

SPECIFICATION forming part of Letters Patent No. 277,809, dated May 15, 1883.

Application filed March 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, THOMAS P. TAYLOR, of Bridgeport, Fairfield county, State of Connecticut, have invented certain Improvements in the Manufacture of Base-Balls, of which the following is a specification.

My invention relates to the manufacture of base-balls, as hereinafter described, whereby I am enabled to make a more solid, symmetrical, and homogeneous ball in less time and at less cost than by the ordinary modes of manufacture.

In making ordinary base-balls it is common to soak scraps of leather in water until the same are softened, then insert the same into cold dies, pressing them together, so as to form a sphere as compact as possible, and then dry the latter. This operation is tedious and expensive, because several days are required before the leather becomes free from moisture, and many of the balls lose their shape—some of them to such an extent that the operation has to be repeated. I avoid these objections by compressing the scraps of leather in molds and subjecting them therein to such heat as will set them in their required shape, so that when withdrawn the spheres are in a condition to be immediately covered, and are so hard and the particles so solidified that the spheres will not lose their shape by the handling to which they are subjected.

In carrying out my invention I may employ apparatus substantially as shown in the accompanying drawings, in which—

Figure 1 shows the filling devices; Fig. 2, a press for compressing the spheres, and Fig. 3 a mold detached and filled.

The dies may be steam or oven heated, may be of different constructions, and different modes of introducing the material into the dies may be employed. One which I have found to be advantageous consists in applying a funnel, A, to a filler-tube, E, into which the material is forced. The tube is then put upon a die, B, beneath a press, and brought beneath a plunger-die, D, which descends and compacts the material. In some instances the funnel may be applied directly to the die. The plunger-die is then disconnected from the operating screw or rod and fastened by set-screws *i* or otherwise, so as to retain its position until the sphere of condensed material is set in shape. While different modes of heating the material in the die may be employed, I prefer to then introduce the die into an oven, where it is brought to the proper temperature. By this means large numbers of dies may be filled and heated at one time. To facilitate the extracting of spheres one or both sections of the die may be formed with a movable piece, *e*, the face of which coincides with that of the inside of the die, and provided with a rod, *t*, extending through a hole in the die and projecting beyond the same, so that a blow upon the end of the pin will force the section inward and loosen the sphere. The spheres thus formed are made in a very short time, as the scraps may be used almost dry, and any moisture therein is quickly expelled, while there is no loss from their becoming disintegrated or out of shape. The spheres, after being pressed, may be wound with yarn, so as to properly confine the articles, after which the covering is applied, as usual.

It will be apparent that this mode of manufacture may be employed with any material which can be compacted effectively in the manner described. I have found that balls of perfect shape may be thus made of leather, cloth, or cork scraps, wood shavings, waste paper, sawdust, "excelsior," hair, and other waste materials.

I claim—

1. The within-described method of making base-balls, the same consisting in compacting the filling material, under pressure, in dies, and subjecting the same to heat until set in shape, and then applying the covering to the spheres thus formed, substantially as set forth.

2. In the manufacture of base-balls, the application to a section of a mold of a funnel, A, filling the receptacle thus formed with scraps, compressing the latter by means of a plunger, and then clamping the filling between the two sections of the mold, and subjecting the same to heat in an oven until set in shape, substantially as set forth.

3. A mold for base-balls, consisting of two parts, and a movable portion, *e*, with a projecting pin, *t*, substantially as set forth.

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

THOS. P. TAYLOR.

Witnesses:

FRANK S. ANDREWS,

CLARA E. WHITE.