

order to show Mr. Orford that I could make a practical switch, as well as for my own satisfaction." On the other hand, in the contract of January 15, 1889, with Orford and a Mr. English, Bryant says: "I hereby agree that the exclusive and entire sale of my switch" shall rest in the hands of said company. Orford was not called either to support Platt's claim of their prior conception and reduction to practice, or to explain said contract, or to corroborate the claim that Bryant worked under his instructions. This latter claim is unsupported by any sufficiently definite evidence. Complainant, therefore, has failed to prove either a prior completed conception or reduction to practice, or Orford's connection with the Bryant model. Walk. Pat. (3d Ed.) § 76, and cases cited. Let the bill be dismissed.

JACKSON et al. v. BIRMINGHAM BRASS CO. et al.

(Circuit Court, D. Connecticut. February 21, 1896.)

No. 770.

1. PATENTS—INFRINGEMENT.

A patent covering a process for converting smooth, seamless, sheet-metal tubing into spheroidal bodies, by swaging and upsetting them by endwise compression between dies having the form of the body to be made, is not infringed by a process of forming spheres from corrugated tubes by compressing them endwise in dies of the proper shape, where the changes of shape are made solely by the folding or unfolding of the corrugations, without any upsetting of the metal.

2. SAME—ESTOPPEL—EXPUNGED DISCLAIMER.

A patentee is not estopped by an original disclaimer which is afterwards stricken out, but the same may nevertheless be considered for the purpose of ascertaining the inventor's conception of the true nature of his invention, and what was new and what was old.

3. SAME—PROCESS OF FORMING HOLLOW SPHEROIDAL BODIES.

The Jackson & Burkhardt patent, No. 378,412, for a method of forming hollow spheroidal bodies from sheet-metal tubes, construed, and held not infringed, as to claim 1.

This was a suit in equity by William H. Jackson and others against the Birmingham Brass Company and others for alleged infringement of a patent.

Witter & Kenyon, for complainants.

George A. Fay, C. E. Mitchell, and H. B. Brownell, for defendants.

TOWNSEND, District Judge. The complainants herein, by the usual bill, ask for an injunction and accounting because of the alleged infringement by defendants of the first claim of complainants' patent, No. 378,412, granted to them and John Burkhardt, February 21, 1888, for a "method of forming hollow spheroidal bodies from sheet-metal tubes." The claim in suit is as follows:

"The process herein described of forming hollow spheroidal bodies from thin sheet-metal, oblate at their extremities, which consists in first forming the metal into a tube, then placing a short section of said tube between two dies having the form of the body to be made, and compressing the tube in the said dies."

The patent itself, interpreted by the aid of the file wrapper, so effectually supports the defense of noninfringement, that it has been found unnecessary to consider the other defenses, of direct anticipation and nonpatentability, in view of the prior art, and by reason of the nature of the patented process. The defendants admit that they have manufactured hollow ornamental balls by the following process:

"A thin sheet metal was first in the form of a tube. This tube was corrugated by passing it through suitable dies. It was next cut into short sections. The length of each section of tubing was determined with reference to the size and shape of the ball to be manufactured, and to the process employed by the defendant for making such balls. The section of tubing was then compressed between two dies having the form of the body to be made. One die was supported in the bed of the press. The other was attached to a plunger. A short section of tubing was placed in the die, in the press bed, whereupon the upper die was brought down on the upper end of the tubing, and the tubing compressed at both ends at the same time in such a way as to flatten the corrugations at each end, causing the tubing to assume the shape of a ball, all being done at a single operation of the press. The tubing was substantially the same in diameter, before compression, as the mouth of the lower die. The dies operated to compress the ends of the tubing in the manner stated, causing it to conform to the shaping walls of the dies. Some of the dies were provided with a pin or stop at the base of the concavity, to prevent the metal from closing in further the apertures at the extremities resulting therefrom. The balls were completed and brought into their finished form, as shown in the exhibits, by this single operation of the press acting upon the corrugated tubes. * * * No lining of any kind was used with the tube to support it during compression. Balls were sometimes made with raised central portions or girdles. * * * The girdle is produced by cutting a section of pipe too long for the dies, so that before the two halves of the dies meet the metal is forced outward, the dies being stopped at the proper time to produce the configuration shown."

By means of this process the corrugations in the tubing were so crimped or folded together at the ends as to cause the tubing to conform to the shape of said dies. There was no shortening or thickening or thinning of the metal itself. The material remained of the same thickness. The changes in size and shape of the article were due solely to the expansion and contraction of the folds of the corrugations.

The specifications of the patent in suit describe a process for converting seamless metal tubing into spheroidal bodies by first forming thin sheet metal into a tube, and then subjecting it to endwise compression with dies having the form of the body to be made. The patentee states that this process is based upon his discovery—

"That comparatively thin tubes of large diameter can be swaged and upset into spheroidal form by dies, and that the metal can thereby be upset, without crimping, to receive the desired forms."

All the drawings which concern the claim in suit show either tubing or spheroids with plain surfaces.

In his original application for a process patent, the applicant said:

"I am aware * * * that the folding together of the ends of sections of corrugated tubing for ornamental purposes is not new. But my invention relates to the conversion of seamless plain sections of tubing into ornamental hollow bodies, ready for use," etc.

This paragraph was afterwards stricken out, and in its place the following paragraph was inserted:

"Having described my improved process of forming hollow spheroidal bodies, I would state that I am aware that very small articles, like beads, have heretofore been shaped by compressing the ends only of tubular sections into a rounded form, without shaping the periphery thereof, the tube being comparatively thick in relation to size of the article to be formed, so that sufficient body is provided in the tube to prevent crimping or doubling; and I am aware that larger hollow articles have been swaged into more or less rounded form, from comparatively thin tubular metal, by first casting a thick temporary lining of soft metal into the tube, to give body thereto, and then shaping in one or more sets of rounded dies. But my invention differs from the former in making bodies of any desired size without using tubing of a thickness increased as the diameter is enlarged, and also in not only swaging and upsetting the ends of the tube into a smaller diameter, but also enlarging the diameter of the middle part thereof; and it differs from the latter most essentially in not employing lining of soft metal, or any other material; and it differs from both in that, whereas in those cases there is only a changing of the shape of the tube, there is no upsetting of the metal, making it thinner in some parts and in others thicker, my process does thus greatly change the thickness of the metal in different places; and, so far as I am aware, I am the first to discover that comparatively thin tubes of large diameter can be swaged and upset into spheroidal form by dies, and that the metal can thereby be upset, without crimping, to receive the desired forms."

It seems manifest, from these various statements of the patentee, that he thereby limited himself to a swaging or upsetting process which does not embrace the process used by defendants. Of course, he is not estopped by the original disclaimer, which was afterwards stricken out. But, as is forcibly urged by counsel for defendants, said language "is a distinct statement upon the record of the facts as he knew them to exist, and, although the statement never became a part of the patent, it nevertheless discloses the inventor's conception of the true nature of his invention, and what was new and what was old." In the patent itself the patentee says, "My process does thus greatly change the thickness of the metal in different places," by swaging and upsetting the metal, and differs from the prior art, where "there is only a changing of the shape of the tube, there is no upsetting of the metal, making it thinner in some parts in others thicker." And he claims to be the first discoverer of this capacity of such metal tubes to be thus "upset without crimping," and shows in his drawings only plain tubes as the ones possessing such capacity. Inasmuch as defendants' process is applied only to corrugated tubes, and changes the shape of such tubes solely by folding or unfolding the corrugations therein, and does not upset the metal, or make it thicker in some parts and thinner in others, in which respects it differs from the alleged discovery of the patentee, as described by him and differentiated from the prior art, there is no infringement. Let the bill be dismissed.

PUTNAM v. BROOKER et al.

(Circuit Court, S. D. New York. August 31, 1895.)

PATENTS—INFRINGEMENT—BOTTLE STOPPERS.

The Morhous patent, No. 377,043, for an improvement in wire ball bottle-stopping devices, if patentable at all, must be strictly confined to the device described in the specifications and shown in the drawings, and