

held them only as security for a debt which he owed, less in amount than the bonds. The amount of the debt nowhere appears in the pleadings, though it is admitted that the bonds were held as security only.

Conceding all that is claimed in the argument opposing this motion, to wit, that the judgment in this action will be conclusive in another by the present plaintiffs upon the same bonds as to the liability of the defendants upon the bonds to the extent of the debt of Jones, for which they are held, still our jurisdiction cannot be maintained, unless it also appears that this debt exceeds \$5,000. *Prima facie*, the judgment against a defendant in an action for money is the measure of our jurisdiction in his behalf. This *prima facie* case continues until the contrary is shown; and, if jurisdiction is invoked because of the collateral effect a judgment may have in another action, it must appear that the judgment conclusively settles the rights of the parties in a matter actually in dispute, the sum or value of which exceeds the required amount. No issue was raised here as to how much was actually due the plaintiffs from Jones, and the testimony is by no means clear upon that subject. Certainly there is nothing in the record which concludes the parties upon that question; and, as it rests upon the plaintiff in error to establish our jurisdiction affirmatively before we can proceed, the writ is

Dismissed.

GLUE COMPANY v. UPTON.

1. The mere change in form of a soluble article of commerce, by reducing it to small particles so that its solution is accelerated and it is rendered more ready for immediate use, convenient for handling, and, by its improved appearance, more merchantable, does not make it a new article, within the sense of the patent law.
2. To render an article new within that law, it must be more or less efficacious, or possess new properties by a combination with other ingredients.
3. Reissued letters-patent No. 4072, granted July 12, 1870, to Thomas P. Milligan and Thomas Higgins, assignees of Emerson Goddard, for an improvement in the manufacture of glue, — the alleged improvement consisting “of glue comminuted to small particles of practically uniform size, as distinguished from the glue in angular flakes hitherto known,” — are void for want of novelty.

APPEAL from the Circuit Court of the United States for the District of Massachusetts.

This is a suit in equity by the Milligan and Higgins Glue Company, against George Upton, for the alleged infringement of reissued letters-patent No. 4072, for an improvement in the manufacture of glue, granted July 12, 1870, to Thomas P. Milligan and Thomas Higgins, assignees of Emerson Goddard, upon the surrender and cancellation of original letters-patent No. 44,528, issued to the latter Oct. 4, 1864. The complainant is the assignee of Milligan and Higgins. The bill prays for an injunction, and for an account of the defendant's gains and profits arising from the manufacture and sale of the patented article. Upon hearing, the court below dismissed the bill, whereupon the complainant appealed here. The facts relating to the alleged invention are stated in the opinion of the court.

The case was argued by *Mr. Edmund Wetmore* for the appellant.

The court declined to hear *Mr. George L. Roberts* and *Mr. Chauncey Smith* for the appellee.

MR. JUSTICE FIELD delivered the opinion of the court.

In the court below, the defendant questioned the validity of the surrender of the original patent and of the reissue; but, from the view we take of the alleged invention or discovery, it is unnecessary to consider this point. We shall treat the reissue as for the same invention or discovery, differing in no substantial particular from that originally patented. In the specification accompanying the reissue, the patentee states that he has invented a new and useful article, which he denominates "instantaneous or comminuted glue;" and then proceeds to describe the glue of commerce previously found in the market, and to point out the inconveniences attending its use, and the manner in which they are obviated by his invention. He states that the ordinary glue of commerce was then sold in the form of hard, angular flakes, and that it required a good deal of time to prepare it for use,—first by soaking it in cold water, and afterwards by heating it in a hot-water bath until the flakes were dissolved. The time thus occupied, he says,

is saved by his invention, as his article does not require to be prepared for solution by soaking, is quickly permeated by water, so that it can be dissolved in large quantities ready for mechanical use in less than five minutes, and in smaller quantities for domestic use in less than one minute. Another objection stated to the glue of commerce as previously sold is, that great inconvenience was experienced in retailing it, from the difficulty of putting it up in small packages, by reason of the sharp, angular corners and edges of the broken flakes, which cut the wrappers, causing a waste of time and stock. The new article, he says, can be put up by machinery or by hand into packages of uniform size and of regular form and weight, similar to those in which ground spices are put up for domestic use, and sold by retail traders. He also states that the new article has a more pleasing appearance than the ordinary glue of commerce, in that it has a white color, and is consequently more merchantable, and brings a higher price.

The specification then proceeds to describe the best process which the inventor has devised for making such instantaneous glue, and the apparatus or machinery he has used. These consist of a breaking machine, for crushing the flakes into small pieces, and of a rasping or grating machine, for comminuting the broken pieces into uniform grains. But for these mechanical means or processes the patentee makes no claim, observing, that it is obvious that other means or processes of crushing or reduction may be used to manufacture his article out of dry flake glue or gelatine by a crushing or breaking operation, and that his claim is only to the comminuted glue as a new article of manufacture.

It thus appears that the invention claimed is not any new combination of ingredients, creating a different product, or any new mechanical means by which a desirable change in the form of a common article of commerce is obtained; but it consists only of the ordinary flake glue reduced to small particles by mechanical division. The advantages from such division consist in its more ready and rapid solution, its greater convenience for packing and retailing, and its whiter appearance and enhanced salability. The whole claim is to an old article of commerce in a state of mechanical division greater than pre-

viously used, but unchanged in composition and properties ; and the benefits arising from the increased division are such as appertain to every soluble substance when divided into minute particles.

This statement, which is substantially a repetition in a condensed form of that by counsel, is supported by reference to numerous instances where similar results have followed the mechanical division of soluble objects into small particles ; but we do not deem it necessary to mention them, for the point involved presents no difficulty. There is nothing new in the fact that the solution of a soluble substance is accelerated by increasing its fragmentary division ; nor is there any thing new in the fact that articles with rough angles and edges can be more readily put up into packages without injury to their wrappers when reduced by mechanical division into small particles ; nor is there any thing new in the fact that such articles generally improve in appearance by granulation or powdering.

A distinction must be observed between a new article of commerce and a new article which, as such, is patentable. Any change in form from a previous condition may render the article new in commerce ; as powdered sugar is a different article in commerce from loaf sugar, and ground coffee is a different article in commerce from coffee in the berry. But to render the article new in the sense of the patent law, it must be more or less efficacious, or possess new properties by a combination with other ingredients ; not from a mere change of form produced by a mechanical division. It is only where one of these results follows that the product of the compound can be treated as the result of invention or discovery, and be regarded as a new and useful article. The three advantages attributed to comminuted glue over the flake glue were, previous to the alleged invention of Goddard, recognized as following from a division of soluble objects into small particles, in the treatment of a great variety of articles in constant use in the kitchens of families, and in pharmacy. Where certain properties are known to belong generally to classes of articles, there can be no invention in putting a new species of the class in a condition for the development of its properties similar to

that in which other species of the same class have been placed for similar development; nor can the changed form of the article from its condition in bulk to small particles, by breaking or bruising or slicing or rasping or filing or grinding or sifting, or other similar mechanical means, make it a new article, in the sense of the patent law.

This subject is elaborately considered by the presiding justice of the Circuit Court, in his opinion, with reference to numerous adjudications of the courts of England and the United States; and in his conclusion on this point we concur.

Decree affirmed.

RUBBER-COATED HARNESS-TRIMMING COMPANY v. WELLING.

Letters-patent No. 37,941, granted March 17, 1863, to William M. Welling, for an improvement in rings for martingales, are void for want of novelty, being merely for a product consisting of a metallic ring enveloped in a composition of ivory or similar material.

APPEAL from the Circuit Court of the United States for the District of New Jersey.

The facts are stated in the opinion of the court.

Mr. J. C. Clayton and Mr. H. Q. Keasley for the appellants.

Mr. Frederic H. Betts, contra.

MR. JUSTICE HUNT delivered the opinion of the court.

William M. Welling brought this suit in the Circuit Court against the Rubber-Coated Harness-Trimming Company and others, alleging an infringement of his letters-patent No. 37,941, bearing date March 17, 1863, for an improvement in rings for martingales, and recovered damages. The company thereupon appealed to this court.

Welling's patent bears date of March 17, 1863, and recites that a previous patent to him described a particular mode of making factitious ivory, out of which billiard-balls and rings of various kinds were manufactured, and states that his present invention does not relate to that particular composition, but that "the nature of my said invention consists in the employ-