

Case No. 5,165. FUZZARD WADDING MANUF'G CO. V. DICKINSON ET AL.
[6 Blatchf. 80: 3 Fish. Pat. Cas. 289.]¹

Circuit Court, D. Connecticut.

April 3, 1808.

PATENTS—INFRINGEMENT.

The claim, in the reissued letters patent granted to William Fuzzard and James Hatch, April 5th, 1801, to “the employment or use of a heated metallic cylinder, B, or one having a metallic exterior or periphery, in combination with a heated pressure cylinder, C, one or more, and a polishing roller, G, or its equivalent, arranged as shown, for the purpose of surfacing and drying simultaneously, or at one operation, fibrous materials, as set forth,” is not infringed by the use of a machine which employs a pressure roller that is not heated, and is not constructed so as to be heated, in any particular way.

[This was a bill in equity filed to restrain the defendants [Thomas N. Dickinson and others] from infringing letters patent [No. 41,214] for an improved machine for surface-sizing fibrous material, granted to William Fuzzard, January 12, 1864, assigned to William Fuzzard and James Hatch and reissued to them April 5, 1864 [No. 1,649], and assigned to complainants.

[The claims of the patent were as follows, although the first one; only, was in controversy: “The employment or use of a heated metallic cylinder B, or one having a metallic exterior or periphery, in combination with a heated pressure cylinder, one or more, and a polishing roller G, or its equivalent, arranged as shown, for the purpose of surfacing and drying simultaneously or at one operation, fibrous material, as set forth. Also, the distributing or throwing of the glazing or sizing upon or against the cylinder or upon or against a web without a cylinder, by means of a brush, substantially as set forth.”

[A description of the invention and of the defendant’s machine so far as involved in the suit, will be found in the opinion of the court]²

SHIPMAN, District Judge. The defendants, who are engaged, like the plaintiffs, in the manufacture of wadding, are charged in the bill with infringing the rights of the plaintiffs secured by this patent. The character of the machine used by the defendants is clearly proved, and, in order to determine whether or not it embraces the invention of Fuzzard, we must look into the specification and claim of the patent and see what is there set forth as such invention.

The object of the alleged new device is described, in the body of the specification, to be “for applying a glazing or size to fibrous substances, such as cotton, wadding, &c., in such

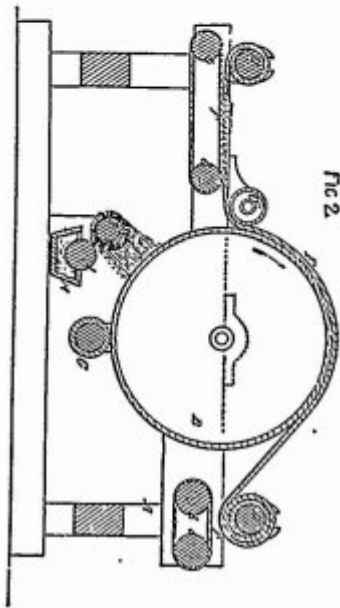
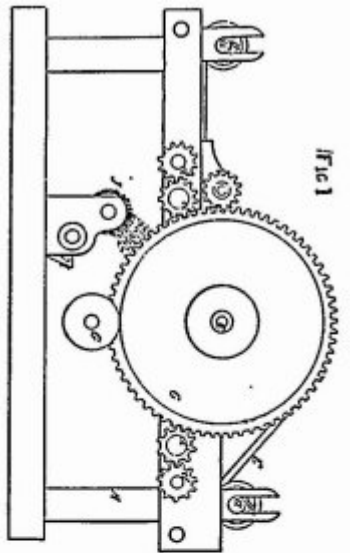
a manner that a quite thin or attenuated sizing may be used and applied to the web or material to be glazed, sized, or 'surfaced,' as it is technically termed, and said material dried at the same operation. * * * To this end the invention consists in the employment and use of a smooth or polished metal cylinder, heated by steam, or otherwise, over a portion of which the web to be surfaced passes, and of a heated pressure roller bearing against the web upon the metal cylinder, the cylinder or web having the glazing or size previously distributed upon it by means of a revolving brush, or its equivalent, as hereinafter set forth."

The machine is very simple, and may be briefly described as follows: First, a solid frame of suitable dimensions, near the central part of which is placed a hollow metal cylinder, of large size. This cylinder revolves upon a hollow shaft, the ends of which rest upon the two sides of the frame, and is heated usually by steam. The web to be sized is placed on a common roller at one end of the frame, and is, during the operation of the machine, made to pass over the upper portion of the cylinder, and off on to another roller, which receives it as it leaves the cylinder. Between the roller from which the web is taken to the cylinder, and the cylinder itself, and very close to the latter, is a small heated pressure roller, between which and the cylinder the web passes, and by which it is pressed into close contact with the cylinder. The sheet of web passes under this pressure roller and over the cylinder, and the former is so adjusted as to give the degree of pressure required. Underneath the cylinder there is a roller, attached to the frame, and made to revolve in contact with the cylinder. This is called a polishing roller. It has a surface of felt, or some other suitable material, and, as it revolves, with its surface in contact with the surface of the revolving cylinder, it cleans and polishes the latter. Between the point where this polishing roller and the cylinder come in contact, and the point on the cylinder where the web first reaches it, there is a size trough, in which another roller wallows, carrying the size into contact with a revolving brush, which takes it up and distributes it on the surface of the cylinder. The different parts of the machine are rotated in the usual way, by cog-wheels and endless aprons. When the machine is in motion, the size is thrown on the surface of the cylinder, (or it may be thrown on the under surface of the web, or on both that and the cylinder,) and the web passes under the pressure roller, on to, and in close contact with, the cylinder, from which it is peeled off at a point nearly opposite from where it is taken on, and wound on the roller which receives it after the sizing and glazing are completed. By this combined operation of the machine, sheets or webs of very slight strength or toughness are run through and glazed with a smooth surface.

I have thus given a description of the material parts of the machine and its mode of operation, without designating the parts by letters referring to the drawings. But, as these letters are introduced into the claim, it will be well, before citing that, to say, that the large heated cylinder is designated as B, and the small heated pressure roller as C, and the pol-

ishing roller as G. The claim is as follows: "The employment or use of a heated metallic cylinder, B, or one having a metallic exterior or periphery, in combination with a heated pressure cylinder, C, one or more, and a polishing roller, G, or its equivalent, arranged as shown, for the purpose of surfacing and drying simultaneously,

[Drawings of patent No. 41,214, published from the records of the United States patent office:]



or at one operation, fibrous materials, as set forth." There is a further claim touching the operation of the revolving brush, but that is not in controversy here.

Now, the frame and large cylinder of the defendants' machine are like those of the plaintiffs'. The defendants also use a pressure roller, which presses the web into contact with the cylinder. In place of the polishing roller of the plaintiffs, the defendants use a clearing bar, placed across the frame, and very nearly in contact with the cylinder. As the cylinder revolves, this bar catches, and takes from its surface, any portion of the wadding that may have adhered to it. A packing is thus soon formed between the clearing bar and cylinder, which wipes, and, to some extent, cleans the latter, as it revolves. It can hardly be said to polish it, though, for the purposes of this case, we may assume that it does.

By recurring to the description of the plaintiffs' invention, it will be seen, that it consists of three elements in combination, namely, a heated metallic cylinder, a heated pressure roller, and a polishing roller. The question now presents itself whether the defendants use the same elements, or their equivalents, in combination. If they do, they infringe the rights secured by the plaintiffs' patent. If they do not, then they do not infringe. The defendants' cylinder is the same as that of the plaintiffs, and we will assume, for the purposes of this case, that their clearing bar is an equivalent for the plaintiffs' polishing roller, though that may well be doubted. We have, then, two elements of the invention in combination. But the third is equally essential to the infringement. This third element is the pressure roller. In the specification it is described as a small metallic cylinder, and, in that, as well as in the claim, it is described as a "heated pressure roller" or cylinder. This heated pressure roller is described, in the body of the specification, as performing two functions, namely, drying and pressure. "The cylinder C," the pressure roller, "being also heated, dries off the steam that passes through the web at this point"—the point of contact of the web with the main cylinder—"and the web, passing over the upper part of the cylinder B, is glazed, or sized, and dried, the two processes being performed simultaneously, and finished before the web reaches the point where it leaves the cylinder B. The cylinder C," the pressure roller, "also presses the web to the cylinder B, and causes it to adhere to the glazing or sizing on cylinder B. One or more of these cylinders, C, may be used." Now, the defendants use, for a pressure roller, a common solid wooden cylinder, not only not heated, but not constructed so as to be heated in any particular way. The only function that it performs is to press the web into contact with the large metal cylinder, in order to make the sizing adhere to and glaze the surface of the sheet of wadding. But, I am asked to hold that this roller of the defendants is the equivalent of the heated pressure roller of the plaintiffs. This cannot be done, under any reasonable rule of construction. The patentees do not, either in the body of their specification, or in their claim, assert their exclusive right to any combination except one in which the heated pressure roller forms one of the essential elements. Wherever they describe their roller, they call it a heated roller, and, in setting

forth its functions, they describe it as drying off the steam which passes through the web. It is true, that they also say that it performs the other function of pressing the web against the cylinder. But they nowhere intimate that they claim this roller when it is so constructed and used as to perform only the duty of pressure. It is clear to my mind, in view of the state of the art, that they deemed it essential to the validity of their patent, that the element of heat should characterize and qualify this member of the combination. In some branches of the wadding manufacture, the ordinary non-heated roller is nearly or quite as useful as the heated roller described in the patent; and this must have been perfectly obvious to the inventor, who was well acquainted with the state of the art. It is incredible that, with this fact before him, he should have omitted to claim simply a pressure roller, whether heated or not, had he deemed it within the scope of his invention. But, whether this is so or not, the specification and claim are so drawn as fairly to exclude the idea that any except a heated pressure roller was intended to be claimed. If Fuzzard was the first and original inventor of the combination of cylinder, polishing roller, and pressure roller, whether heated or not, the specification should have so described and claimed it. As it does not, either expressly or by fair inference, this suit fails, for the defendants do not use the combination described and claimed in the patent.

The bill must, therefore, be dismissed, with costs.

¹ [Reported by Hon. Samuel Blatchford, District Judge, and by Samuel S. Fisher, Esq., and here compiled and reprinted by permission. The syllabus and opinion are from 6 Blatchf. 80, and the statement is from 3 Fish. Pat. Cas. 289.]

² [From 3 Fish. Pat. Cas. 289.]