

the main track and disconnected from the cable at certain stations, others will be switched off at the other stations. Giving as full a scope to the invention covered by the plaintiff's patent as the state of the art will warrant, we think it clear that the defendant's apparatus does not infringe.

Decree of the circuit court affirmed.

WRIGHT & COLTON WIRE-CLOTH CO. v. CLINTON WIRE-CLOTH CO.

(Circuit Court of Appeals, First Circuit. May 10, 1895.)

No. 125.

1. PATENTS—NEW USE OF OLD MEANS.

Where all that an alleged invention does is to apply an old and well-known means to a new use and new material, the patent, if sustainable at all, must be restricted to the specific combination described.

2. SAME—ANALOGOUS USES—EFFECT OF LAPSED PATENTS.

It seems that under the doctrine which gives to the patentee all the uses of which his invention is susceptible, whether known to him or not (*Potts v. Creager*, 15 Sup. Ct. 194, 155 U. S. 597), the public are entitled to all the uses of which the means involved in devices covered by lapsed patents are susceptible; and that a patentee who employs old means with improvements adapting the use to a new or nonanalogous industry is limited to a monopoly of the combination or improved machine.

3. SAME—LIMITATION OF CLAIMS—PRIOR STATE OF THE ART—WEAVING WIRE CLOTH.

The Wright patent, No. 239,012, for an improvement in the art of weaving wire cloth, if sustainable at all, in view of the prior state of the art, should not be construed so broadly as to give a monopoly of all the means of straightening or swaging wire in the wire-weaving industry. 65 Fed. 425, modified.

4. SAME—INFRINGEMENT—WIRE-WEAVING SHUTTLE.

The Wright patent, No. 239,011, for a combination shuttle, in which the alleged invention consists in swaging the twist out of the wire, by passing it over swaging rolls, before leaving the shuttle, if sustainable at all, in view of the prior state of the art, must be narrowly construed, and is not infringed by a shuttle made according to patent No. 299,895, which possesses no swaging rolls, but swages the wire by the use of the delivery rolls, combined with a metal friction post or block. 65 Fed. 425, reversed.

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

This was a suit by the Clinton Wire-Cloth Company against the Wright & Colton Wire-Cloth Company for alleged infringement of two patents relating to the art of weaving wire cloth. The circuit court sustained the patents, found infringement, and directed a decree for an injunction and accounting. 65 Fed. 425. Defendant appeals.

Elmer P. Howe, for appellant.

Causten Browne and Alexander P. Browne, for appellee.

Before COLT, Circuit Judge, and NELSON and ALDRICH, District Judges.

ALDRICH, District Judge. This is a suit in equity in behalf of the Clinton Wire-Cloth Company, wherein it is alleged that the defendant has infringed two letters patent,—one for an improvement in the art of weaving wire cloth, and the other for an improved shuttle whereby the improvement in such art may be practiced. The complainant contends that prior to its inventions there was a practical difficulty in weaving wire cloth by means of a shuttle carrying a cop of wire; and that the difficulty resulted from the fact that the wire, as it lay on the cop, in coils substantially at right angles to the axial line of the shuttle, necessarily at each turn, as the coil was paid out longitudinally from the cop, took into itself turns of twist, by reason of which the wire constantly tended to resume the spiral form in which it was while wound on the cop, instead of remaining in a straight line in the web, as was necessary in order to accomplish satisfactory work.

The complainant claims, under patent No. 239,012, dated March 15, 1881, known as the "Art Patent," an invention which effectually removes this difficulty by swaging the twist into the body of the wire, which result, it is claimed, is accomplished by straining the wire around rollers as it passes from the cop to the loom and its place in the web. Under its other patent, No. 239,011, dated March 15, 1881, the complainant presents a combination shuttle consisting of a shuttle body for weaving wire, with a cop case or chamber, to contain the wire and swaging rolls, around which the wire passes after leaving the cop, and before leaving the shuttle, whereby the twists of the wire are swaged into its body, and smooth weaving insured. So it will be seen that under the Art patent, which is the first patent mentioned here, the complainant seeks to monopolize or control the means of swaging or straightening wire as it passes from the cop to the web; and that, under the second patent named, he seeks to control or monopolize the use of a combination shuttle, which it is said effectually performs the work.

We are of opinion that the means of straightening or swaging wire, as a general proposition, are old and well known, and that it has been understood for a long time that wire having crooks or twists could be straightened either by a hammering process, or by drawing the wire under tension around a rigid body or hard substance, like the horn of an anvil, for instance. It is probable that the boy is rare who has not in his playdays been confronted with the problem of straightening crooked or twisted wire, and it may be safely said that the problem was readily solved by holding one end of the wire in each hand, and drawing it firmly around some hard substance; and it mattered not, except in degree, whether the substance was a fixed rounded, or circulating, surface. It is probably true that the molecular condition of crooked or twisted wire is in a measure changed when subjected under tension to any of the old and well-known processes of straightening; and it therefore follows that the complainant's first or "Art Patent," so-called, should not, if sustained, be construed so broadly as to give a monopoly of all the means of straightening or swaging wire in the wire-weaving industry; and as we dispose of this case without passing upon the validity of the

second patent, which is the patent covering the combination shuttle or device, we do not deem it necessary to pass upon the question whether such particular device accomplishes more or better results than the means involved in the older devices known and open to the art of weaving.

As has been said, the complainant's device covered by his shuttle patent is the combination of a shuttle body for weaving wire with a cop case or chamber to contain the wire and with swaging rolls, around which the wire passes after leaving the cop, and before leaving the shuttle. In this machine or combination shuttle there are three rolls, which are designated as "swaging rolls," and two other rolls, which are denominated as the usual "delivery rolls." The wire, under the strain of weaving, passes around the three first named, and then around one or the other of the delivery rolls, to its place in the web. As the shuttle is passed from one side of the loom to the other, the wire is drawn around the delivery roll nearest to the point to which the shuttle is directed. The complainant does not claim that the two rolls called "delivery rolls" are new, or that they perform in this device any necessary swaging function; and in fact it is conceded that they were in use and known to the public as delivery rolls, both in wire and textile fabric weaving, long before the complainant's alleged invention. The device known as the "Combe Patent" was an English device invented in 1857, and was designed to be used in the textile fabric industry. It possessed a semicircular friction block or post, which performed the double function of putting friction upon the weft thread, and of guiding the thread on its course to the loom. It also possessed a steel channel or groove on the side of the shuttle, through which the thread was drawn as it was delivered to its place in the web. While this device was limited in design and in use to weaving textile fabrics, and had no reference whatever to the idea of swaging turns of twists from weft-wire threads in the wire-weaving industry, it unquestionably embodied the means of performing that function. Perhaps not satisfactorily, but it possesses the means and will accomplish the work in a degree. It is urged by the learned counsel for the complainant that the problem of swaging turns of twists into wire thread was never presented in the textile-fabric industry during the life of the Combe patent. If this be so, "doubtless a patentee is entitled to every use of which his invention is susceptible, whether such use be known or unknown to him" (*Potts v. Creager*, 155 U. S. 597, 606, 15 Sup. Ct. 194); and, if the Combe patent were in force, the patentee would doubtless be entitled to control the use of his device in the wire weaving as well as in the textile fabric weaving industry. Under the doctrine which gives to the patentee all the uses to which his invention is susceptible, whether known or unknown, it is difficult to see why the public should not be entitled to all the uses to which the means involved in devices covered by lapsed patents are susceptible, or why a patentee who employs the old means with improvements adapting the use to a new or nonanalogous industry should not be limited to a monopoly of the combination or improved machine. To say that one who discovers that old means will do

a new work without any change may thereby monopolize the old means as applied to such new work, or, in other words, to say that because of such discovery others engaged in the wire-cloth industry shall not, in weaving, run a wire thread through the means used in the older industry, would be carrying the discovery doctrine altogether too far.

On the view most favorable to the complainant, all its alleged invention does is to adapt or apply old and well-known means to a new use and new material; and if the question as to the validity of the patent were a question necessary to a decision of this case, and if "the patent could be sustained at all" (*Brook v. Aston*, 27 Law J. Q. B. 145, 28 Law J. Q. B. 175, 176; *Potts v. Creager*, 155 U. S. 597, 606, 607, 15 Sup. Ct. 194; *Watson v. Stevens*, 5 U. S. App. 101, 107, 2 C. C. A. 500, and 51 Fed. 757; *Pennsylvania R. Co. v. Locomotive Engine & Safety Truck Co.*, 110 U. S. 490, 494, 4 Sup. Ct. 220; *Brown v. Piper*, 91 U. S. 37; *Roberts v. Ryer*, *Id.* 150; *Atlantic Works v. Brady*, 107 U. S. 192, 2 Sup. Ct. 225; *Tucker v. Spalding*, 13 Wall. 453; *Rob. Pat. § 259*, and note 1), "it would have to be restricted and confined to the specific combination described" in the specification and claims (*Knapp v. Morss*, 150 U. S. 221, 228, 14 Sup. Ct. 81; *Duff v. Pump Co.*, 107 U. S. 636, 639, 2 Sup. Ct. 487; *Newton v. Furst & Bradley Co.*, 119 U. S. 373, 7 Sup. Ct. 369; *Bragg v. Fitch*, 121 U. S. 478, 484, 7 Sup. Ct. 978; *Dryfoos v. Wiese*, 124 U. S. 32, 37, 8 Sup. Ct. 354). If, therefore, we were to assume in this case that the wire-weaving industry is nonanalogous to the textile-fabric industry, and that the complainant's combination was patentable as a combination of old means with improvements adapting it to a new and nonanalogous material and use, still the monopoly would be limited to the combination, and would not extend to the old means employed in the new industry without invoking the aid of the improvements involved in the new combination or device, for which the complainant seeks protection.

The Tunstill patent of 1864 was a device for textile weaving, and employed a tubular gudgeon and a round roller as means for protecting weft thread from becoming entangled as it passed from the cop; and the Bigelow patent of 1857 was designed as an improved device for use in weaving wire cloth, and employed a series of pins, which were designated as a "wire straightener," through which the wire was drawn out from the bobbin between guide rollers to the loom, and to the pins there was applied a spring to hold the pins "in greater or less proximity, according as more or less pull is required to straighten the wire." It is also claimed for the last-named device that "two conforming friction surfaces may be employed to straighten the wire, said surfaces being pressed together by a spring, and the wire drawn between them." The Washburn patent of 1865 covers a wire-straightening machine with fixed points or rollers, whereby it is claimed that "wire may be more readily and effectually straightened than by machines hitherto employed for this purpose," and it sets forth that the wire is to be drawn between fixed points or rollers. Without pursuing the state of the art or older devices further, it may be observed that weavers of wire and textile cloths

have variously employed friction posts, blocks, metal grooves, channels, and rollers in connection with the shuttle for the purpose of straightening textile and wire weft thread. The defendant's alleged infringing shuttle is covered by letters patent No. 299,895. It possesses no swaging rolls, but employs the delivery rolls, which are old, combined with a metal friction post or block somewhat larger than that used in the Combe patent, around which the wire is paid out from the cop or spindle, and passed through the delivery rolls to the loom. As has been said, the delivery rolls are old, and the friction post or block is old; and if there is, as claimed, peculiar virtue and novelty in the combination of the complainant's swaging rolls with the delivery rolls, which are old, then the defendant's device does not possess such virtue or novelty. It is sufficient for the purposes of this case to say that, if we were to assume that the complainant's combination presents a patentable device and a better shuttle than any other known in the art of wire weaving, we should feel bound to construe the patent as not covering or controlling all means of swaging turns of twists into wire, during the process of weaving. It follows, therefore, as the defendant's alleged patentable combination employs such means only, for straightening or swaging wire, as were old and well known, that the rights of the complainant are not infringed.

The decree of the circuit court is reversed, and the case remanded to that court, with directions to dismiss the bill, with costs.

THE HINDOUSTAN.

STARACE v. COMPAGNIE NATIONALE DE NAVIGATION.

(Circuit Court of Appeals, Second Circuit. April 16, 1895.)

SHIPPING—DAMAGE TO GOODS—EXCEPTIONS IN BILL OF LADING.

Under a bill of lading containing exceptions of "deterioration of fresh fruits or vegetables, * * * moisture by fresh or salt water, condensation, * * * decay of every kind or vice propre," the burden of proof is upon the shipper to show that deterioration in a shipment of garlic might have been avoided by the exercise of reasonable skill and attention on the part of the ship.

Appeal from the District Court of the United States for the Southern District of New York.

This was a libel by Achille Starace against the steamship Hindoustan (the Compagnie Nationale de Navigation, claimant) to recover damages for deterioration and decay of four shipments of garlic brought from Naples, and consigned to the libelant. The district court dismissed the libel, and the libelant appeals.

The opinion filed by BROWN, District Judge, in the court below was as follows:

Under the bills of lading the burden of proof is upon the libelant to show negligence in the carrier; since the damage was by an excepted peril; negligence in this case could only be the omission of the customary ventilation for garlic in passenger ships. The proof does not show such omission, but the presence of the usual and sufficient ventilation for properly cured garlic.