BONSACK MACH. CO. v. ELLIOT.

(Circuit Court, S. D. New York. April 4, 1894.)

PATENTS—VALIDITY AND INFRINGEMENT—CIGARETTE MACHINES.

The following patents for cigarette machines *held* valid and infringed as to the claims mentioned, namely: The Hook patent, No. 184,207, as to claim 2; the Emery patent, No. 216,164, as to claims 10, 12, 14, and 15; the Bonsack patent, No. 238,640, as to claims 6 and 7; and the Emery patent, No. 308,556, as to claims 1 and 2.

This was a suit in equity by the Bonsack Machine Company against Henry C. Elliot for infringement of certain patents for cigarette machines.

Samuel A. Duncan and M. B. Philipp, for orator.
Edwin H. Brown, for defendant.

WHEELER, District Judge. This suit is brought upon letters patent No. 184,207, dated November 7, 1876, and granted to Albert H. Hook; No. 216,164, dated June 3, 1879, and granted to Charles G. Emery and William H. Emery; No. 238,640, dated March 8, 1881, and granted to James A. Bonsack; and No. 308,556, dated November 25, 1884, and granted to William H. Emery,—all for cigarette machines, and owned by the orator. The only invention shown of a cigarette machine proper prior to the date of Hook's application, April 3, 1876, is that described in French patent, No. 104,164, antedated July 8, and issued October 5, 1874, to Abadie & Co., for such a machine. Hook's invention is claimed to have been made prior to the issuing of that patent; and upon this point the testimony of witnesses in another case, among others that of C. A. Brown, has been stipulated into this case, upon condition that they should be produced for cross-examination. Brown died without being so produced, and a motion to suppress his testimony for that cause has been made, and is granted. The other evidence, however, shows clearly the priority of Hook's invention over the issuing of the patent to Abadie & Co., and leaves the field of invention of such a machine, at the time of his invention, open to him. In all of these machines a continuous ribbon of paper for a wrapper, coming from a spool flat, is drawn past a wheel which gums one edge, through a tapering former, which gradually raises the edges, and folds them over one under the other with the gum between around the filler, and through a tube which presses the gummed edges together, causing them to adhere, making a continuous cigarette, to be cut into suitable lengths, for smoking. In Hook's invention the paper ribbon was drawn past the gumming wheel before entering the former, and granulated or otherwise prepared. Tobacco was delivered from a bucket wheel, having an intermittent motion, into the hollow formed by the rising edges of the paper as it passed into the former. In practice, suitable paper was found to be too delicate to bear the strain of being filled and pulled through the machine; and an endless belt of common ribbon was put in, and drawn through with the paper ribbon, to support it. In the patent

of the two Emerys the filler is continuously formed in an endless traveling belt, curved about it by the walls of a chamber through which it passes, and carried forward separate from the belt, which receives a paper ribbon coming from a spool below for a wrapper, and returns to it again, and takes them through a former which wraps the paper about the filler, past a pasting disk and tube, keeping them in form, to devices cutting them into suitable lengths. In Bonsack's patent the machine has an open trough for receiving the tobacco for forming the continuous filler in a belt with side guides, and a former wrapping the paper about the filler, with a spiral groove, for carrying the narrower belt to one side of the paper out of the way of the paste. In the patent of William H. Emery the machine has a packing bar, pressing with intermittent motion upon, and moving forward with, the tobacco in the filler-forming chamber, and more completely forming a continuous filler.

The claims in question of the patent to Hook are:

"(1) The method herein described of forming cigarette cylinders, consisting in drawing a ribbon through a tube-forming die, and simultaneously feeding the tobacco upon the ribbon, the same being previously gummed and finally pasted, as herein described.

"(2) The combination of spool, A, gumming wheel, B, trough, C, cylinder, D, with a mechanism for charging with tobacco and drawing the ribbon, a, through the trough and cylinder, as set forth."

Of the patent to the two Emerys are:

"(10) In combination with an endless belt, a filler-forming chamber, and a guide for applying a wrapper around a filler, a conductor or chamber through which the continuous filler and wrapper are conveyed to a suitable pasting device, whereby the swelling of the filler is prevented, and the wrapper is held in form while the edges are secured by pasting, substantially as described."

"(12) The combination of a gage or former for uniting the edges of the wrapper with a paste supplying and distributing disk, and mechanism for operating the same, a guide for wrapping a wrapper around the filler, a filler-forming chamber, and an endless flexible belt, all to operate in a manner substantially as described.

"(13) In combination with devices for forming a continuous cigarette, an endless belt and a guide tube, whereby a continuous filler in a sealed wrapper is inclosed and carried forward, substantially as described.

"(14) In combination with devices for forming a continuous cigarette of any desired size, an endless belt, a guide tube, and a delivery tube, whereby a continuous cigarette is presented to the action of suitable cutting mechanism for division into desired lengths, substantially as described.

"(15) The combination of an endless belt and guide tube with a delivery tube and suitable cutting devices, whereby a continuous cigarette of any desired diameter can be advanced and severed into desired lengths, substantially as described."

Of the patent to Bonsack are:

"(6) In a cigarette machine which rolls a continuous cigarette in an endless belt, by passing through a tapering tube, the combination of an open trough having side guides for the belt, a tapering tube having a spiral groove extending from one of said side guides, and a terminal section to the tapering tube, having its edges lapped past each other, but not united, so as to form a flange continuous with the spiral groove, substantially as and for the purpose described.

"(7) In a cigarette machine which rolls a continuous cigarette in an endless belt by passing through a tapering tube, the combination of an open-

ing trough having side guides for the belt, a tapering tube having a spiral groove extending from one of the side guides of the trough, and a terminal section having its edges separated to form a flange, b′, to give access to the paste wheel, and then closed again, as and for the purpose described."

And of the patent to William H. Emery are:

"(1) In a cigarette machine, the combination, with a traveling filler-carrying belt and a packing chamber, of a tamping, packing, and compressing bar, and mechanism, substantially as described, for giving said bar intermittent action upon the tobacco, substantially as and for the purpose set forth.

"(2) In a cigarette machine, the combination, with a filler-carrying belt and a packing chamber, of a tamping, packing, and compressing bar, and mechanism, substantially as described, for giving said bar motion towards and with the belt at intervals, substantially as and for the purpose set forth."

Many patents for inventions of various machines for enveloping hemp or flax waste in a sliver of longer staple for spinning into yarn for weaving, for making rubber belting and rubber tubing, for covering hoop-skirt wires, and for making fuse, have been pleaded and proved as anticipations or as narrowing part or all of these inventions. But wrapping granulated or otherwise properly prepared tobacco with suitably delicate paper into cigarettes is very different in accomplishment from making the things for which the machines of those patents were adapted. Many of them have parts similar to like parts of the machines of these patents, but none of them are adapted, and could not be without great changes, to making cigarettes; and none of them have any of the combinations of these claims doing the same thing in substantially the same way. The first claim of Hook is sought to be upheld as for a process. It mentions an operation as a method; but the operation so mentioned is of mechanical parts, producing only mechanical changes in the form and relations of the tobacco and paper operated upon, resulting in nothing new. The process of making cigarettes by wrapping paper about tobacco was old. These means of doing it only were new. This claim as for the process appears to be without foundation and invalid. Corning v. Burden, 15 How. 452; Tilghman v. Proctor, 102 U. S. 722. The second claim of Hook seems to be valid for the mechanism described. The addition of the belt to the machine of the Hook patent is argued to have been a mere abandoned experiment. The machine appears, however, to have been operated, with the belt in it as a part of it, in making cigarettes. So the combination of the belt with the parts of that machine was known to and used by those putting in the belt and operating the machine. Those who came after that machine with the belt could invent only improvements upon that combination in machines having those parts. That part of the invention of the patent to the Emerys brought into their twelfth claim seems to add a filler-forming chamber; that brought into their tenth claim, a filler-forming chamber and conductor to such a machine; and that brought into their fourteenth and fifteenth claims, to combine a delivery tube and cutting devices with parts of such a machine. These claims appear to be valid. The thirteenth claim does not

appear to be for anything new, nor in any way to be valid. That part of the invention of the patent to Bonsack brought into his sixth and seventh claims seems to add side guides, a spiral groove, and flange to such machines, for keeping the belt to one side of the paper ribbon, away from the paste. These claims appear to be valid. And that part of the patent to William H. Emery brought into his first and second claims seems to add the intermittently moving packing bar, and these claims appear to be valid.

The alleged infringement consists in making and using cigarette machines constructed according to the specifications of reissued patent No. 11,104, dated August 19, 1890, and granted to Robert Hardie, assignor to the defendant. In this machine, as there specified, the stock for the filler is first deposited in a thin layer upon a feed table, provided with a traveling feed belt. A blade then carries a row of the stock along the table towards jaws, between which the mass is clamped. A tongue then compresses the material between the jaws into a solid block or rod against a support, the material being thus molded in a four-part mold, so that it forms a rod or section of the filler in its fully-compressed state before the application of the wrapper, thereby rendering unnecessary any further compression after the application of the wrapper. Meanwhile the wrapper in the form of a continuous strip is bent to a U shape transversely, and is then conducted with a traveling belt through a grooved support guide or receiving chamber, and the jaws then convey the rod to a position above the curved wrapper, and the tongue descends and moves the rod from between the jaws, discharging it into the wrapper, where in some cases it will expand slightly, the end of the rod overlapping that previously deposited, and the tongue pressing the overlapped portions together to form a continuous filler. The belt travels continuously, so that, while the tongue is in contact with the rod, the tongue and the receiving chamber travel longitudinally, together with the belt, wrapper, and rod; but, as soon as the tongue rises, the chamber and tongue move longitudinally back to their former positions. The wrapper and filler are then carried by the belt from the reciprocating chamber to a folding chamber, where one edge of the paper is turned in, the paste applied to the standing edge, and the latter is then turned down and secured, the belt conducting the wrapper and rod until these operations are accomplished, after which it is deflected, and the filled wrapper passes through a holder, which serves as a support and as an edge against which a revolving cutter shears the same into short sections or cigarettes. The tongue is given two principal motions,—an up and down reciprocating motion between the jaws, and a longitudinal reciprocating motion with the receiving channel. The up and down motion serves to compress the tobacco into a rod, to clean the jaws, and force or deliver the rod of tobacco stock down into the receiving channel. The longitudinal motion is applied, and the tongue carried forward simultaneously with the receiving channel at the same time that such tongue is being forced between the grippers down into the receiving channel, "giving it sufficient pressure at the lapping end to form

with that portion which has passed forward in the channel a continuous cigarette rod." The peculiar shape and arrangement of the former in relation to the receiving channel and the paper ribbon as it is fed off from the reel, and passes below an adjusting roller, causes the paper ribbon to be evenly and neatly folded up in the U-shaped form shown in the receiving channel. It travels through the receiving channel with its edges under hooks or turned-down flanges of guides, and the ribbon is maintained in such shape with the tobacco rod resting in it throughout the length of the receiving channel, and until it is acted upon by beveled folding rollers above the folding channel. The tape is also folded into a U shape by the former, and travels through the receiving channel below the paper ribbon, so as to protect it, and to assist in carrying it forward. After leaving the receiving channel, the paper ribbon is folded over first at one edge, while the other edge is pasted, and then the pasted edge is folded over to form a complete wrapper for the filler rod, as heretofore described with reference to the folding channel and its beveled rollers. As the wrapped and completed rod passes forward through a tubular holder in the cutter carriage, it is cut into cigarette lengths by a rotating cutter blade. The machines show this peculiar shape of the former more fully than the patent, and that it is the same, and causes the paper ribbon to be folded in the same manner, as the trough of the Hook patent; and the shape of the trough as a folding device is continued throughout the folding devices of these machines, and, as such, it folds the paper ribbon about the filler in the same way. These machines have also the general arrangement of the machine of the Hook patent, with the belt and mechanism for making a continuous filler and cutting device added, and the wrapping device separated into two parts with the paste wheel between, and provided with guiding grooves for the belt. In operation the tongue presses the stock into sections of a filler between the jaws on the belt bringing the stock to place, and carries them into the receiving channel, lapping the forward end upon the end of the preceding one, and pressing them into a continuous filler, and moves forward in the receiving channel with it towards the grooved wrapping device, where it is wrapped, the wrapper being pasted and pressed down, and carried forward to the cutting device, and cut into suitable lengths. The tongue has a motion, in forming sections of the filler between the jaws, and bringing them over the receiving channel, which the tamping, packing, and compressing bar of the Emery patent does not have, but also has the same motion which that bar has, in completing the continuous filler in the receiving channel, and following it along; and the receiving channel does the same thing about completing the continuous filler and guiding it along that the filler-forming chamber and conductor of the Emerys patent do, although it comes to them in sections so far completed in form. The order in which the pasting is done is wholly immaterial. The wrapping devices, although separated, wrap the filler in substantially the same way that the trough of the Hook patent, as improved by the guides and grooves of the sixth and seventh claims of the Bonsack patent,

does. The guide rollers do the same thing as the cylinder of the Hook patent and the guide tube of the Emerys patent do, in substantially the same way; and the continuous cigarette is carried by a delivery tube to cutting devices in substantially the same way as in the Emerys patent. The machine, therefore, seems to embody the combinations of the second claim of Hook, of the tenth, twelfth, fourteenth, and fifteenth claims of the Emerys, of the sixth and seventh claims of Bonsack, and of the first and second claims of Emery.

The foundation patent of Hook expired November 7, 1893. This freed all done afterwards from that monopoly. The claim of the other patents, as mentioned, remain valid for what they cover as improvements upon that, which are the filler-forming chamber and conductor, the guides and grooves of the former, and the packing bar in their respective combinations. Against further infringement of these by the use of the tongue-receiving channel and guides and flanges in the former of the defendant's machine, the orator seems to have a right to an injunction. Let a decree be entered for the orator that the second claim of the Hook patent was, and the tenth, twelfth, fourteenth, and fifteenth claims of the Emerys, the sixth and seventh claims of the Bonsack, and the first and second claims of the Emery patent are, valid, and have been infringed, and for an injunction against further infringement of these claims of the last three patents, and for an account of the whole.

MAITLAND v. GIBSON.

(Circuit Court of Appeals, Third Circuit. October 22, 1894.)

No. 17.

1. PATENTS—COMBINATION—ELECTRIC LIGHT FIXTURES.
   In view of the prior state of the art, there is no invention in a combination comprising an electric light fixture supported from the piping of a house, and electrically insulated therefrom by an insulating joint. 63 Fed. 126, affirmed.
2. SAME.
   The Stieringer patent, No. 259,235, for an "electrical fixture," *held* to be without patentable combination, as respects claims 1, 7, 8, and 9. 63 Fed. 126, affirmed.
3. SAME—MECHANICAL UNION OF PARTS.
   The Stieringer patent, No. 294,697, for a combined gas and electric light fixture, *held* void as to claims 1, 2, 8, and 9, as showing a mere mechanical union of parts, without patentable combination. 63 Fed. 126, affirmed.

Appeal from the Circuit Court of the United States for the Eastern District of Pennsylvania.

This was a bill in equity by George Maitland against Alfred C. Gibson for infringement of certain patents for electric light fixtures. On final hearing the bill was dismissed, with costs. 63 Fed. 126. Complainant appeals.

Richard N. Dyer, for appellant.

Hector T. Fenton, for appellee.