that plow remained or were removed, the result would have been the combination in question; and, though it be conceded that in the combination so made the disk would be required to perform the function of a wheel, and also the function of turning the soil, and incidentally of varying the distance between the charges dropped, that is not important, because the fact that a disk is a wheel is obvious, and to make it serve the uses of a wheel in addition to any other known function cannot be invention. The Loughry patent is not less significant. If its disks do not carry the seed box, and are not functional otherwise like those of the patent in suit, it needed only to transfer to it the seed box of Lynch, with its mechanism for measuring and dropping the grain, and to connect the mechanism with the disks, instead of the spoked wheels.

DETROIT MOTOR CO. v. JENNEY ELECTRIC MOTOR CO.

(Circuit Court, D. Indiana. December 17, 1897.)

No. 9,176.

PATENTS-INVENTION-ELECTRIC SWITCHES.

The Blades patent, No. 418,678, for an improvement in electric switches to be used with shunt-wound electric motors, is void, for want of patentable invention, as to claims 1 and 4, since the only new element not found in the prior art is a spring attached to the switch for returning it to its initial position when the magnet is de-energized; and there is no invention, in view of the prior art, in the use of a spring for this purpose.

This was a suit in equity by the Detroit Motor Company against the Jenney Electric Motor Company for alleged infringement of a patent relating to electric switches.

George H. Lothrop, for complainant. Chester Bradford, for defendant.

BAKER, District Judge. This is a suit for infringement of patent No. 418,678, granted to the complainant, as assignee of Harry H. Blades, dated January 7, 1890, for an improvement in electric switches to be used with shunt-wound electric motors. The answer denies patentable novelty in the alleged invention, in view of the prior state of the art, and also denies infringement. The specification states that:

"It is the object of the invention to provide a switch for electric motors on constant potential circuits, such that, when there is a cessation of the current, it will automatically break the armature circuit, and assume its initial position, ready at will to gradually turn the current on the armature in starting. In starting shunt motors on constant potential circuits, the field circuit is first made, and then the current is thrown gradually on the armature. This leaves the switch lever for starting the armature in its final position. In stopping, the operator first breaks the main circuit, including the field circuit, and then, after the motor stops, turns the switch lever for starting the armature from its final position back to its initial. Very often, however, the operator forgets to turn this armature lever back, and, when the time comes to start, the motor turns on the main switch, and then throws the full current into the armature before it has time to generate its counter electro-motive force, and thus reduce the current flowing through it. The result of this is that either the armature is burned out or the fusible plugs put in for its protection are blown; also, the circuit is sometimes broken for a short time by the stopping of the dynamo, a short circuit at the central station, or for some other cause. In this event the ordinary armature lever would, of course, stay in its final position, and, when the current is re-established, either the armature or the plugs would burn out."

It is further stated that:

"The object of the invention is to obviate these difficulties by a device such that when the circuit is broken, whether intentionally or not, the armature will be thrown out of circuit."

The invention described in the specification consists in the combination with a shunt-wound electric motor of a magnet in the field circuit of the motor, a hand switch in the armature circuit adapted to be held in its closed position by the magnet, and means for opening the hand switch automatically when released by the magnet.

There are four claims in the patent. The first and fourth are alone involved in this suit. These are as follows:

"(1) In a shunt-wound electric motor, the combination, with the field circuit, of a magnet in the said circuit, a hand switch adapted to open and close the armature circuit, said switch arranged to be held in its closed position by the magnetism of the said magnet, and means for automatically retracting the said switch to its initial position when the magnet is de-energized by the cessation of the current through the field circuit, substantially as described."

"(4) In a shunt-wound electric motor, the combination, with the field circuit, of a magnet in said circuit, a hand switch adapted to open and close the armature circuit, said switch arranged to be held in its closed position by the magnetism of the said magnet, and a spring for automatically retracting the said switch to its initial position when the magnet is de-energized by the cessation of the current through the field circuit, substantially as described."

The prior state of the art, as shown by the patents in evidence, consisting of the patents of Frank L. Pope, No. 126,486; Edward Weston, No. 264,983; Wightman and Lemp, No. 367,082; Henry E. Walter, No. 373,034; George D. Sheperdson, No. 389,254; and George H. Whittingham, No. 396,791,-tends strongly to show that no patentable novelty is disclosed in the combination of either claim alleged to be infringed. In the Walter patent, granted in 1887, is found every element of the first and fourth claims of the patent in suit, except the spring for returning the switch to its initial position when the same is released by the demagnetization of the electro magnet upon the cessation of the passage of the electric current through the magnet caused by the opening or breaking of the circuit. The complainant's expert says that the Walter patent is upon an automatic starting device, consisting essentially in an automatic adjustable resistance in the armature circuit operated by an electro magnet in the field circuit of the motor, to automatically cut out the resistance in the armature circuit of the motor. In his cross-examination, speaking of the Walter patent, he admits that the motor there illustrated is a shunt-wound electric motor; that there is a magnet in the field circuit; that there is a switch adapted to open and close the armature circuit; that the operation of the magnet is to draw the switch towards itself over the contacts of the resistance; that such effect ceases when the cur-rent ceases; and that, if a spring or other equivalent device were provided, the switch would be returned thereby to its initial position when the magnet was de energized by the opening or breaking of the circuit.

The only new element not found in the prior art is the spring attached to the switch for returning it to its initial position when the magnet is de-energized. Does the device of the patent in suit, in view of the prior state of the art, attain to the dignity of invention? It seems to me that it does not. The court is of opinion that, to a mechanic skilled in the art, the use of a spring or its equivalent for returning the switch to its initial position would have occurred as soon as the advantage of such automatic return was suggested. Some of the patents in evidence show the use of a spring for accomplishing substantially the same purpose as that to which the spring is applied The many familiar uses of a kindred character in the patent in suit. to which springs are applied deprive the device in the claims in suit of patentable novelty. It results that the bill must be dismissed for want of equity, at complainant's costs.

SOEHNER v. FAVORITE STOVE & RANGE CO. 1

(Circuit Court of Appeals, Sixth Circuit. December 7, 1897.)

No. 486.

1. PATENTS-COMBINATION CLAIMS-PRACTICABILITY.

Where the claims are somewhat obscure, and it is objected that the combination is not a practicable one, the court will apply the rule that the claims are to be construed in the light of the specifications; and if, looking at both, the court is able to understand the meaning of the patentee in the language of his claims, and as so understood the combination is practicable, it will give effect to them according to the apparent purpose.

2. SAME-ANTICIPATION.

The existence and prior public use of an article embodying the combination of a patent, in almost exactly the same form, will defeat the patent, whether the advantages of it were known to the manufacturers and users or not.

3. SAME-INVENTION-COOKING STOVES.

The use of curved or swelling side plates along the side grooves of a cooking stove being known, the employment of the same construction at the rear end of the side plates, alongside the vertical grooves, is merely an extended application of the same idea, or a duplication of the former construction to perform a like service, and is not patentable.

4. SAME.

The Boal reissue, No. 11,462, for improvements in cooking stoves, consisting in the use of inwardly curved side plates joined to the flue plates, construed, and held to be void, in view of the prior state of the art, for want of patentable invention.

5. DESIGN PATENTS-SCROLL WORK ON STOVES.

In view of the ancient and common use of scroll work for the ornamentation of exposed surfaces, one cannot now claim broadly, under a design patent, the use of scroll work in general upon the margins of the sides and other prominent features of a stove. To be patentable, there must be something peculiar in the formation of the scrolls themselves, or in their relative arrangement, so as to produce a distinct effect, affording a special utility beyond any ordinary work of the kind.

6. SAME.

The Boal patent, No. 23,780, for a design for stoves, construed, and held not infringed.

Appeal from the Circuit Court of the United States for the Southern District of Ohio.

¹ Rehearing denied February 8, 1898.