

ing or overhanging parts of which, whether polished for the purpose or not, the light passing through mica plates may strike and be reflected. Without going further into the details of the discussion, it is enough to refer to the fireplace heater of James Spear, as illustrated in a catalogue published in 1884 at Philadelphia. Around that heater is a frame, of which the catalogue says: "The frame is large and full nickel plated, has a concaved surface, and extends back some distance, catching the light from the mica windows, and acts as a reflector, casting the light and heat into the room." In this device the inturning is on horizontal instead of vertical lines, and the reflection, of course, is from that part of the frame which is adjacent to the side of the heater; but the mica is placed between the reflector and the fire, and the objection that "there is no provision of an inturned mica section and reflector serving in any manner to reflect the rays of light and heat from the upper surface of the fire pot" is without force upon the question of patentability. Nothing was lacking to the Spear device to fulfill that condition but to put a mica window in the upper part, which was already inturned and capped with a reflector in proper place. To do that certainly could not have been invention. It may be remarked that the "reflecting principle" and the mechanism involved in this patent have long been exemplified in the ordinary forms of lamps and glass chimneys, and the reflectors and shades used in connection therewith.

There is a degree of credit due to one who explores out of the way or hidden places, and brings to the light and to the uses of civilization, as "abandoned experiments," the discoveries of others, whose genius was itself a disqualification for the achievement of practical success; but it is certainly no part of the intention of the patent law to foster attempts to appropriate and monopolize things of commonplace character, and of familiar use, on the ground that, though frequently employed even in patented devices, they have not been claimed as inventions, and their uses and benefits exploited. The obvious need not be explained. The decree below is reversed, with costs, and with direction to dismiss the bill.

SHAW ELECTRIC CRANE CO. v. SHRIVER.

(Circuit Court of Appeals, Second Circuit. March 2, 1898.)

No. 26.

1. PATENTS—INVENTION—ELECTRIC CRANES.

There was no invention in the employment of three independent electric motors controlled from a common point to move the several parts of the old overhead trolley frame, which had previously been operated by three independent engines moved by steam power.

2. SAME.

The Shaw patent, No. 430,487, for improvement in electric cranes, held invalid as to claims 1 and 2, for want of patentable invention.

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

This cause comes here upon an appeal by complainant from a decree of the circuit court, Southern district of New York, entered March 16, 1897, dismissing

the bill. The suit was brought for infringement of letters patent of the United States, No. 430,487, granted to Alton J. Shaw, June 17, 1890, for an electric crane. The patent came first before Judge Acheson, sitting in the district of New Jersey, in a suit by the same complainant against Henry B. Worthington, incorporated, charging infringement of the first, second, and tenth claims of the patent. It was held void for want of invention, in an opinion which will be found in 77 Fed. 992. The suit in the Southern district of New York charged infringement of the first and third claims. The judge who heard the cause followed Judge Acheson's decision, and wrote no opinion.

Frederick H. Betts, for appellant.

John R. Bennett, for appellee.

Before WALLACE, LACOMBE, and SHIPMAN, Circuit Judges.

PER CURIAM. The record is a most voluminous one, covering 1,700 printed pages. Six experts of unquestioned ability have been examined, three on a side. The briefs are able, ingenious, and exhaustive; and yet, when the record has been read, the briefs studied, and the testimony of the experts analyzed, it is apparent that the question presented is, after all, a single one, which may be answered without any extended discussion. Indeed, it seems unnecessary to add anything to the brief opinion of the court in the district of New Jersey.

The claims in question are:

"(1) In combination with a supporting track, a bridge mounted and movable thereon, a trolley or car mounted and movable upon the bridge, a hoisting drum or pulley carried by the trolley, and three independent electric motors, each in communication with a source of electricity, one of said motors being carried by and serving to propel the bridge, and the other two being carried by the trolley, and serving, respectively, to propel the trolley, and to actuate the drum or pulley."

"(3) In a traveling crane, the combination of a bridge, an electric motor carried by and serving to propel the same, a trolley mounted upon the bridge, and an electric motor carried by the trolley, wholly independent of the first, and serving to propel the trolley over the bridge."

An overhead traveling crane is one where there is a movable traveling bridge, a traveling carriage or trolley on the bridge, and a hoist on the trolley, having its various movements actuated by power. The moving bridge imparts, to the body to be acted upon, motion forward or backward; the trolley imparts motion to one side or the other; and the hoist imparts motion up or down. It is manifest that, by the combination of these motions, every conceivable path within range of the crane's capacity may be given to the body sought to be moved. The more harmoniously these three movements are combined, the more quickly one or other of them may be changed, the more variety there may be in the speed of one or all of them, the more efficient will be the crane. Flexibility and smoothness of operation are important elements in such a combination. Overhead traveling cranes, driven by steam power and by hydraulic power, existed before the patentee began to experiment, and in these the three lines of motion were combined, under direction of the operator, to give to the weight moved such a path as he might select. It is conceded that the patent cannot be sustained upon the theory that Shaw substituted electric power instead of steam or hydraulic power in such machines; nor is there any contention

that he devised some new and useful variety of electric motor. The entire invention claimed for Shaw is thus stated:

"Shaw's invention consists essentially, not only in the utilization of independent electric motors, as the moving power for the several traveling parts of his crane, but also in the adaptation of the motors and the crane each to the other by the location of one motor for moving the bridge directly upon the bridge itself, and the location of another motor for moving the trolley directly upon the trolley itself."

The prior art shows traveling cranes operated by steam power, in which the three motions are imparted by three independent engines,—one for each motion,—so arranged that each engine can act as its own brake, and all can be worked at once if desirable. The prior art shows cranes in which these three independent motors were located upon the trolley, and other cranes in which they were located upon the bridge; and, of course, when so placed, a more or less complicated arrangement of clutches, pinions, and gearings was required to transmit the power of the independent motor to the place where it was to act. This was a drawback, but was apparently deemed by the inventors of those earlier cranes less of a drawback than it would have been to furnish each independent motor with its independent boiler, or to supply steam from the single boiler through flexible pipes to motors whose position relative to that boiler was constantly changing. With electric motors, however, it is not essential to locate the motor so near to the source of power, and at a fixed distance from it. On the contrary, the motor may be placed in any position, and the power sent to it over a wire. It was the teaching of the electric art to attach the motor to the driven mechanism much more directly than other kinds of motor, and that, by reason of such direct application, much intermediate shafting and gearing could be dispensed with. It would seem that, given the three independent steam motors, and given the suggestion that electric motors be used to do the work, the locating of each directly on the part it was to move would suggest itself to those familiar with the art. We concur, therefore, with the conclusion expressed in *Crane Co. v. Worthington*, supra, that:

"The differences between the cranes of Force and Newton and the crane of the patent in suit are simply such as would naturally be made in changing the motive power, and whatever of superiority over previously used traveling cranes is to be found in the crane of the patent is due altogether to the recognized advantages inherent in the electric motor."

The decree of the circuit court is affirmed, with costs.

AMERICAN GRAPHOPHONE CO. v. WALCUTT et al.

(Circuit Court, S. D. New York. March 28, 1898.)

INJUNCTION—CONTEMPT—INFRINGEMENT OF PATENT.

Where the officers of a corporation, adjudged guilty of contempt for the violation of an injunction against the infringement of a patent, claim that they were misled by the wording of the decree, they are entitled to the benefit of any fair doubt in that respect, and are not punished beyond making good the injury by paying over the profits and damages of the violation, with costs.