operating machine was added to it by Gates, excepting the diaphragm feature in the Brown patent. Some of the Gates improvements may be on the border line between the skill of a mechanic and the ingenuity of an inventor; but, when considered in connection with his complete line of improvements, from the time that he took hold of the machine until it was a great success, there are certainly displayed marked and important changes in the machine, which could have been produced only by a superior quality of inventive ingenuity."

Our examination of the record leads us to substantially agree with all of this, except the last sentence, in its entirety. The gyrating crushing shaft and the inclined diaphragm chute were inventions in the construction of a successful stone-crushing machine. All the other improvements, in our judgment, were within the domain of skill. As Gates was not the pioneer inventor of either the gyrating crusher shaft or the inclined diaphragm chute, he can take nothing by his claimed invention of details, although, through his pertinacity, diligence, money, and skill, the stone-breaking machine has been made a success. In Atlantic Works v. Brady, 107 U. S. 199, 2 Sup. Ct. 231, it is said:

"The process of development in manufactures creates a constant demand for new appliances, which the skill of ordinary head workmen and engineers is generally adequate to devise, and which, indeed, are the natural and proper outgrowth of such development. Each step forward prepares the way for the next, and each is usually taken by spontaneous trials and attempts in a hundred different places. To grant to a single party a monopoly of every slight advance made, except where the exercise of invention somewhat above ordinary mechanical or engineering skill is distinctly shown, is unjust in principle, and injurious in its consequences. The design of the patent laws is to reward those who make some such substantial discovery or invention which adds to our knowledge, and makes a step in advance in the useful arts. Such inventors are worthy of all favor. It was never the object of those laws to grant a monopoly of every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures. Such an indiscriminate creation of exclusive privilege tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers, who make it their business to watch the advancing wave of improvement, and gather its foam, in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the arts. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens, and unknown liabilities to lawsuits, and vexatious accountings for profits made in good faith."

The decree appealed from is reversed, and the cause remanded, with instructions to dismiss the bill.

THOMSON-HOUSTON ELECTRIC CO. v. JOHNSON CO. et al.

(Circuit Court, W. D. Pennsylvania. January 14, 1897.)

PATENTS—PRELIMINARY INJUNCTION—TRAVELING CONTACTS FOR ELECTRIC RAILWAYS.

The Van Depoele patent, No. 495,443, for improvements in traveling contacts for electric railways, sustained, and preliminary injunction granted, on the strength of prior adjudications.

This was a suit in equity by the Thomson-Houston Electric Company against the Johnson Company and others for alleged infringement of a patent for traveling contacts for electric railways. The cause was heard on a motion for a preliminary injunction.

Betts, Hyde & Betts, Geo. H. Christy, and Knox & Reed, for complainants.

Harding & Harding, for defendants.

ACHESON, Circuit Judge. This suit is upon letters patent No. 495,443, issued on April 11, 1893, to the administrators of Charles J. Van Depoele, for improvements in traveling contacts for electric railways, and the case is before the court upon a motion for a preliminary injunction. The patent was sustained by Judge Townsend, after exhaustive litigation, in the case of Thomson-Houston Electric Co. v. Winchester Ave. Ry. Co., 71 Fed. 192. The defense based upon the earlier granted Van Depoele patent, No. 424,695, was carefully considered by Judge Townsend, and overruled by him. That conclusion, in accordance with the settled rule, I ac-

cept as sound, for the purpose of the present motion.

The defense most pressed here is the alleged prior use of this improvement at the works of the Daft Electric Light Company, at Greenville, N. J., in the years 1881 and 1882. This same defense was set up to defeat a motion for a preliminary injunction to restrain infringement of this patent in a suit by the Thomson-Houston Electric Company against Albert Anderson and others in the circuit court of the United States for the district of Massachusetts, brought after Judge Townsend's decision sustaining the patent. Leonard S. Dumoulin there deposed that, from 1879 to 1882, he "was employed with Mr. Leo Daft in the capacity of an assistant," at Greenville, N. J., and that, in the year 1881, he (Dumoulin) conceived of this improvement, and put it into practice upon a narrowgauge road at the Daft works, and that it was successfully and openly used there for several months in the electrical propulsion of a box car, and that many people saw this car in operation. Judge Colt overruled this defense and granted a preliminary iniunction.

In the present case Mr. Dumoulin has made an affidavit similar to the one he made in the Massachusetts case, but somewhat fuller; and the defendants have produced affidavits of several other persons, who depose, to their personal knowledge, of the alleged anticipating construction at the Daft works in the years 1881 and 1882. If such a construction as Mr. Dumoulin describes was employed at the Daft works at that time, Leo Daft, by reason of his connection with and presence at the works, must have known of it. Now, in a rebutting affidavit made by Mr. Daft and submitted by the plaintiff, Mr. Daft flatly and specifically contradicts the statements of Mr. Dumoulin with respect to the alleged anticipating use at Greenville. The plaintiff also produces affidavits to the same effect, made by several other persons, who were, at the time in question, connected with the Daft works, and, by reason of their positions and duties, must have had personal knowledge of the alleged anticipating construction, had it existed. butting affidavits are not merely of a negative character, but they contain full, positive, and specific statements of fact in disproof of the statements of Mr. Dumoulin and his fellow witnesses. In my judgment the decided preponderance of proof is on the side of the plaintiff in this matter.

Having regard, then, to the adjudication by Judge Townsend, a presumption in favor of the validity of this patent should prevail, I think, at this stage of the present case. It is true that this particular defense was not raised in the Winchester Avenue Railway Case. The very omission, however, is significant. That was a warmly-contested case, and it is improbable that this defense would have been overlooked, had the fact been that an openly used, anticipatory construction was in operation at the Daft works, in Greenville, in 1881 and 1882. It is noteworthy that Leo Daft was a witness for the defense in the Winchester Avenue Railway Case.

Infringement by some of the defendants seems to be clear. I do not understand that this is denied as respects the Steel Motor Company. The moving papers justify the conclusion, I think, that the Johnson Company, of Pennsylvania, is involved in the infringement, and also R. T. Lane, by reason of his official connection with these companies. A preliminary injunction will therefore be granted against these three defendants. Let such a decree be drawn.

THOMSON-HOUSTON ELECTRIC CO. v. UNION RY. CO. et al.

SAME v. NEW YORK, E. & W. P. RY. CO. et al.

(Circuit Court, S. D. New York. May 30, 1896.)

PATENTS-INFRINGEMENT-PRELIMINARY INJUNCTION.

Preliminary injunction granted, on the strength of prior decisions, against the infringement of the Van Depoele patent, No. 495,443, for traveling contacts for electric railways.

These were two suits in equity, brought by the Thomson-Houston Electric Company against the Union Railway Company and others, and the New York, Elmsford & White Plains Railway Company and others, respectively, to restrain the alleged infringement of the Van Depoele patent, No. 495,443, for traveling contacts for electric railways. The cause was heard on motion for a preliminary injunction.

Frederic H. Betts, for complainant.

William C. Witter and George H. Lothrop, for defendants.

LACOMBE, Circuit Judge. The patent has been adjudicated in this circuit, and the claims declared on have been sustained. The defendant in that suit has acquiesced in the validity of the patent, and taken licenses. The validity of the patent is not assailed here, and the manufacturer of the very trolleys operated by defendants in both these suits, the Nuttall Company, has itself conceded validity, and taken licenses. The situation, therefore, is closely analogous to that in Campbell Printing-Press & Manuf'g Co. v. Manhattan Ry. Co., 49 Fed. 930. Ten cars now in use on the Union Railway and four cars on the White Plains road have, or had, the