is sought to differentiate Nos. 1, 2, and 4 by showing that when, in each of them, the change is made from series to multiple, a resistance is not cut in until after the shift of connections has been made and the circuit actually opened; in other words, that the resistance is inserted, not "at the time of changing the connections," but afterwards, and that, instead of the resistance being cut out "as soon as the new motor connection is made," it is then cut in, and subsequently cut out. It is further contended that whereas the fundamental idea of complainants' patent is to break circuit at a time when the current has been reduced by artificially damming it up temporarily by inserting resistances, defendant uses no artificial dams, but relies on an eddy or backset of the current caused by the counter electro-motive force which is developed when the motors are in action. There may be much force in this contention, but the question here presented seems The devices in that case to have been decided in the earlier case. used by the West Hartford Railroad were made by the Walker Company, and were of different types. One of these types was known as "Walker Controller, Type B 1." It breaks circuit at a time when there is no resistance in the circuit, evidently relying on the counter electro-motive force rather than on a resistance dam to reduce the If defendant's Nos. 1, 2, and 4 do not infringe for the reacurrent. sons stated, the Walker "B 1" does not infringe; but the contrary has evidently been held at final hearing, and this court should follow that holding at this stage of the case. As to the group of claims Nos. 20, 21, and 22, defendant admits that No. 4 infringes; and, if Nos. 1 and 2 infringe the main invention of the patent, they would seem to infringe the minor one, whose only novelty consists in the use of resistances, which are cut in and out, as in the earlier art, in a switch combination which embodies the main invention. Injunction in the usual form, but an order will be made suspending its operation, as to such devices of the types Nos. 1, 2, and 4 as are now in use on defendant's road, until one month after opening of the next session of the court of appeals.

ELECTRIC CAR CO. et al. v. WALKER CO.

(Circuit Court, S. D. New York. August 25, 1898.)

PATENTS-INFRINGEMENT -- CONTROLLING SWITCH FOR ELECTRIC MOTORS. The Condict patent, No. 393,323, for a controlling switch for electric motors, is infringed by a controller which uses the same device for regulating the current, by means of cutting in resistances, though a different method is used to prevent sparking.

Motion for Preliminary Injunction. Frederic H. Betts, for the motion. Chas. E. Mitchell, opposed.

LACOMBE, Circuit Judge. This is the patent which was involved in suit by Same Complainant v. Nassau Electric R. Co., 89 Fed. 204, wherein preliminary injunction was granted yesterday (viz. Condict, No. 393,323, November 20, 1888, switch or controller for electric motors), the memorandum in which case may be referred to. The de-

fendant in the suit at bar manufactured the types of controller designated "B 1" and "B 2" in the original suit against the West Hartford Railroad, decided by Judge Townsend, and which types were both held to be infringements of the claims specified. Electric Car Co. v. Hartford & West Hartford R. Co., 87 Fed. 733. It appears that defendant has equipped 10 cars of the Union Railway in this district with controllers of the type "B 2," and it concedes that, as to those, it is to be expected that this court, following Judge Townsend, will grant preliminary injunction. Forty other cars of the same road, however, have been equipped with a modified type of controller, designated "S," and as to these defendant contends that it does not infringe. In this suit, as in the others, there have been prepared diagrammatic representations of the interrelations of motors, coils, and resistances in the several types of controller. Comparing the "S" type with the "B 2" type already held to be an infringement, it will be seen that in the combination of motors and dead resistances they are substantially Indeed, the "S" type more nearly approaches the description alike. of the patent than do some of the types shown in the Nassau Case, for resistances are cut in before the beginning of change from series to multiple, remain in until that change is completed, and are then gradually cut out.

As will appear from the opinion in the West Hartford Case, the original invention of the patent in suit was supplemented in practice by a magnetic blow-out to prevent sparking, using the original device to regulate the current. Defendant in that suit used a noninfringing "arc-spanner" to prevent sparking, but nevertheless was held to infringe, since it still used the device of the patent in suit to regu-The "S" type seems to use this device for the same late the current. purpose, and I am unable to perceive that defendant escapes infringement by supplementing it with a solenoid instead of an arc-spanner. Taking the opinion in the West Hartford Case as a correct construction of the patent, the "S" type would seem to be more clearly an infringement than are some of the types in the Nassau Case. Injunction may issue. Inasmuch, however, as in the Nassau Case its operation was suspended until one month after the opening of the next session of the court of appeals, in order to give defendant an opportunity to secure a review of Judge Townsend's opinion in the West Hartford suit, if so advised, a like suspension will be accorded here.

UNITED STATES MITIS CO. v. CARNEGIE STEEL CO., Limited.

(Circuit Court, W. D. Pennsylvania. July 30, 1898.)

1. PATENTS-INFRINGEMENT-LIABILITY FOR DAMAGES AND PROFITS. Rev. St. § 4900, does not apply to the case of a patent exclusively for a process, nor in any case unless the plaintiff has made or sold the article patented.

2. SAME-SUFFICIENCY OF NOTICE.

An allegation in a bill that defendant infringed a patent after "full notice" of plaintiff's exclusive rights thereunder, if not denied, is sufficient to entitle plaintiff, on recovery, to damages and profits.