# ELECTRICAL ACCUMULATOR CO. *v.* NEW YORK & H. R. CO. *ET AL.*

*Circuit Court, S. D. New York.* October 25, 1889.

1. PATENTS FOR INVENTIONS—INFRINGEMENT—ELECTRICAL ACCUMULATOR.

On motion for a preliminary injunction against the infringement of letters patent No. 252,002, issued January 3, 1882, to C. A. Faure, it appeared that defendant's electrodes were made by mixing the dry powder of the active material with 21/2 per cent, of fluid, and applying the mixture to the plates under hydraulic pressure, by which pressure the particles of the powder and of the fluid are brought into closer contact, producing cohesion of the particles of the mixture, and adhesion to the plate; the fluid being an indispensable agent. *Held* that the mixture, at the moment of application, is a true paste, and, as such, an infringement of claim 1 of such patent, which is for the application of the active layer "to the supports, [electrodes, plates, or grids,] in the form of a paste, paint, or cement, prior to their immersion in the battery fluid."

2. SAME.

It appeared that defendants also made eleotrodes by foroing the dry powder into the interstices of the grid by hydraulio pressure, and then moistening the grid with fluid by which the powder is saturated with the fluid; the mixture hardening by the same process as when mixed by: the other method. *Held* that this prooess was likewise an infringement of olaim 1 of such patent, which covers any oase where the application of the aotive material to the plate, in the form of a paste, paint, or cement, is completed, so as, to leave the plates ready for use "prior to their immersion in the battery fluid."

In Equity. Bill for infringement of letters patent No. 252,002, issued January 3, 1882, to C. A. Faure. On motion for preliminary injunction.

*Betts, Atterbury, Hyde & Betts, (Fredk. H. Betts,* of counsel,) for complainant.

*Starr & Ruggles, (Thos. W. Osborn,* of counsel,) for defendants.

LACOMBE, J. The question whether or not the battery plates used by the defendants are infringements of the first claim of complainant's (Faure) patent, as it stands after filing of the disclaimer, is to be determined in view of the construction given to that patent by Judge in the action brought by the complainant against the Julien Electric Company. 38 Fed. Rep. 117. Under that construction, what Faure discovered was the application of the active layer "to the supports, [electrodes, plates, or grids,] in the form of a paste, paint, or cement, prior to their immersion in the battery fluid." After hearing the testimony as to the experiments of Brush, and the other proofs as to the prior state of the art, which are again presented on the present motion, Judge found that the invention was one of more than usual merit, and allowed plaintiff to file a disclaimer, which should save him what he discovered. Defendants' plates have been made in either of three ways: *First.* By the use of an active material containing over 10 per cent of fluid. This they concede to be a paste, and assert that they no longer use it. *Second.* By mixing the dry powder with about 21 per cent of the fluid, and then applying the mixture to the plates or grids under hydraulic presure. The mixture, before application, does not present the appearance of an ordinary paste; but when it is subjected to high pressure, and when

the particles of the powder and of the fluid are thus extended, or brought into closer contact, there ensues either molecular or chemical action which produces what is known as "setting," the particles of the mixture adhering to each other, and cohering to the grid. To the production of this action the fluid is apparently an indispensable agent. No other satisfactory reason for its use is shown. Whether or not, therefore, a mixture of dry powder with 21/2 percent of fluid is a paste while in the mixing tub, it seems to be a true paste at the moment of application. Its components are substances by whose combination a paste may be formed, and such mixture acts as a paste does. *Third.* Defendants also force an absolutely dry powder into the interstices of the grid by hydraulic pressure. While the particles of the powder, thus compacted together, are still in place, the grid is moistened with the fluid, either by brushing it over, or by applying it to a carpet saturated with the fluid; being laid for a moment first on one side and then on the other upon the carpet. Sometimes it is also dipped momentarily in a bath of the fluid. The result of these processes (or either of them) is a saturation of the powder. The percentage of fluid in the mixture thus formed is not stated, but it is probably considerably higher than the 21/2 per cent, of the second mixture. The mixture thus formed on the grid hardens in a few seconds, apparently going through the same process of setting as when mixed in the other methods.

The defendants claim that this last process is the same as that used by Brush in the experiments proved in the former case, and that therefore it is still open to them, despite the affirmance of the first claim of Faure, as modified by the disclaimer. They contend that all Faure did which Brush did not was to mix his paste before he applied it to the plate at all. This, however, seems too narrow a construction of Judge opinion. If that is all that Faure invented, it is difficult to see in what respect his discovery merited the encomiums passed upon it in the opinion. What Brush did was to immerse a plate coated with dry material, not only into fluid, but into the very fluid in which it was forthwith and without removal therefrom, put to use as a battery plate. If such immersion of Brush's dry material in the battery fluid did not form a paste because the electrical action to which it was subjected prevented its setting (which is what complainant claims,) Brush's experiments did not anticipate Faure, who did discover the use of paste. If such immersion of Brush's dry material did form a paste, it was formed after, and not before, the immersion of the plate in the battery fluid. Complainant's patent, however, covers any case where the form in which the layer of active material is applied is that of a paint, paste, or cement; the application of such paste, paint, or cement being completed, so as to leave the plates ready for use, "prior to their immersion in the battery fluid." Whether the paste is compounded in the mixing tub, or on the surface of the grid, seems immaterial, if the paste, etc., is in fact formed, and that process completed, before immersion for battery purposes. The

Brush experiments, however, would no doubt cover the defendants' fourth method, as described by their witnesses, viz., where a perfectly

dry powder is compacted upon the grid by hydraulic pressure, and no fluid is added until the plate goes into use in the battery. Order accordingly.