projecting but a short distance below the seat. If it be intended that the rails are grooved and the rockers tongued, there would be no difference in the principle. The specification alleges: "The rockers may be connected to the rails of the stand by flexible bands, in passing over studs projecting from the sides of each, to prevent the seat from moving back and forth on the rails, or rocking too far either way. These bands may be slipped off the studs when the chair is to be taken apart for packing." The first claim, which is the only one said to be infringed, is as follows: "The stand, A, having rails, B, the seat, *c'*, and rockers, C, fitted to the said rails, and the elastic bands, M, combined and arranged substantially as specified."

Having thus stated in what that part of the Singer machine consists which is the subject of controversy here, the question naturally presents itself, in what respect it was new and the subject of a patent.

The movement of a rocking-chair on a stationary platform, instead of rockers moving on the floor, was not the invention of Singer. That device had been used before. In a general sense it was contained in the patent of Samuel Simmons, of December 21, 1819, and particularly in the patent of Samuel H. Bean, of March 31, 1840. Bean states that the principal feature of his invention consisted in making the seat (and stool, as he calls it) of the chair in two parts, so that while the stool remains stationary the seat was made to rock on rockers. The base or rail on which the rockers moved in *his* chair were smooth, but there was a flange on the *outside* of each rocker similar to that on the inside of a railroad car-wheel, and which he calls guards, which prevented the seat from having any lateral movement. There were certain hanging metallic plates whose upper ends were suspended from the inside of the seat frame by pins, the object of which was to prevent the seat from being thrown off the stool. Without referring now to some of the other patented improved rocking-chairs which have been set up by the defense, it is clear that Singer found a platform or stool, with a chair on rockers moving on the rails or base of the stool, with flanges on one side of the rockers to prevent lateral displacement, and also with a device to prevent the seat and the rockers from being thrown off the stool. Now, what did he add to or change as to this part of his patent? He tongued the rails or base, and elevated them at the ends, and grooved the rockers, instead of making flanges on the outside of each, thus fitting the rockers to the rails or base, and he attached an elastic band to the platform on each side of the stand. With a rocker attached to an ordinary chair, moving on

a rail or platform base, as existed in Bean's chair, tonguing and grooving the rocker and the base, and elevating the latter at each end, would seem to be no more than a mere mechanical change. In that case all that is left would be simply the fact that an elastic vertical band is attached to the two parts of the structure to prevent the chair from being thrown off the platform; and the elastic band is nothing more than a mechanical device to accomplish the object named. But in any view of the subject it seems clear that the patent, if it could be sustained for the particular manner in which the chair is constructed, namely: "The stand, A, having rails, B, the seat, c', and rockers, C, fitted *to the said rail;* and the elastic bands, M, combined and arranged as specified;" then the chairs constructed by the defendants do not come within the specific descriptions here contained, and so would not infringe the plaintiff's patent. But we prefer to place our opinion upon broader grounds, and to say that, fairly construing the device here in question, as set forth in the specifications, there was nothing in it that entitled Singer to a patent.

DAMON & BIHN *v.* EASTWICK.*

(*Circuit Court, E. D. Pennsylvania.* October 23, 1882.)

PATENT—PRIORITY—EMPLOYE.

One who is the first discoverer of a process is entitled to a patent therefor, even against one in whose employ he was at the time of the discovery, and at whose request and expense he was making experiments which led to the discovery

Hearing on Bill, Answer, and Proofs.

This was a suit between parties who had respectively made application for a patent for the "manufacture of sulphate of alumina." The commissioner decided in favor of the present respondent, whereupon the complainant filed this bill. After the filing of the bill, letters patent No. 239,089 were duly issued by the commissioner to the respondent. The facts are sufficiently set forth in the opinion.

F. T. Chambers and *George Harding*, for complainant.

Baldwin, Hollingsworth & Fraley, for respondent.

BUTLER, D. J. In the year 1880 the complainants and respondent, respectively, made application for letters patent for improvements in

*Reported by Frank P. Prichard, Esq., of the Philadelphia bar.

the manufacture of sulphate of alumina or aluminous cake, involving the same invention. The commissioner, after the usual hearing and examination, decided in favor of the respondent, to whom letters were accordingly issued. The complainants have filed this bill to obtain the benefit of a review, in the light, not only of the evidence before the commissioner, but also of that taken here. The respondent challenges the court's jurisdiction, as well as the claim to priority of invention. As our judgment is with the respondent on the second point, and the bill must therefore be dismissed, the former may be passed by.

Little need be said in passing on the question of priority. In January, 1878, the respondent discovered that aluminous cake, of superior quality, may be obtained from halloysite, by the process described in his patent. This process consists in mixing ground halloysite, sulphuric acid, and hydrate of alumina, in the manner and proportions stated in the specifications, whereby a high degree of heat is generated by chemical action, producing ebullition, the halloysite rapidly decomposed, the fine particles of silicia thus liberated infused throughout the entire mass, resulting in a uniform homogeneous cake. It is unnecessary to review the prior state of the art, or recount the complainants' experiments in the direction of this discovery. Mr. Damon was president of the Pennsylvania Salt Company, whose business, in part, was the manufacture of aluminous cake. Having been tendered the purchase of extensive halloysite beds in Indiana, he was anxious to ascertain how this mineral could be profitably employed. Experiments were accordingly made, which satisfied him and his company, that it was valuable for the manufacture of aluminous cake, and they bought it in the fall of 1877. It is quite clear, however, that the experiments were incomplete, and the process subsequently patented had not then been discovered. Eastwick and Bihn were the company's chemists, and it was in the further prosecution of the experiments by Mr. Eastwick, at Mr. Damon's request, that the patented process was developed. All previous efforts had fallen short. That halloysite can be dissolved by sulphuric acid, and the resultant cake rendered neutral by the addition of hydrate of alumina, had been ascertained. But this was insufficient even to suggest the subsequent discovery,—which was not simply that halloysite may be thus dissolved and hydrate of alumina employed as a neutralizing agent, but a process whereby a high degree of heat is generated, the action of the sulphuric acid accelerated, and the decomposition and final result greatly improved,—mainly by the em-