circuit breakers designed and adapted for different work. In neither is there any necessity for shifting the path of the current from one circuit to another. They show the principle of breaking the current and deflecting it automatically employed by Smith, but the differences in the organization of the apparatus are as radical as the differences in the work for which each is designed.

A decree is ordered for complainant, adjudging the infringement

of the second and fifth claims of the patent.

FETTER and others v. NEWHALL.

(Circuit Court, S. D. New York. April 23, 1884.)

PATENT-DRIVE-SCREW-INFRINGEMENT.

The orator's patent for a drive-screw held to be restricted to a screw having a smooth conical point large enough to divide the fibers of the wood so as to give free entrance to the threads of the screw.

In Equity.

Amos Broadnax, for orators.

William Bakewell, for defendant.

Wheeler, J. This cause has been heard on a motion for punishment of the defendant for violation of the injunction granted on final hearing. Fetter v. Newhall, 17 Fed. Rep. 841. The defendant appears to make or be concerned in making two kinds of drive-screws, one of which has a conical point in diameter at the base equal to the diameter of the shank within the threads, and the other having threads extending to the extremity of the point; the threads of each being of the same shape as those of the orators' patent. The novelty and utility of invention on which this patent was granted by the patent-office. accepted by the patentee, and held valid by this court, consisted in the conoidal or conical smooth point large enough to part the fibers of the wood, in driving, and make an entrance for the threads, so that they would not be forced against the fibres to make a pathway for themselves or for one another. It did not cover the threads separately from the point, and cannot be made to cover them now. Keystone Bridge Co. v. Phanix Iron Co. 95 U.S. 274. Neither of these devices of the defendant has such a point. It is urged that the threads at the point of the defendant's screws make the points the equivalent of the patented point. The foremost threads do, in driving, with the smaller point make way for the rest of the threads as the larger point does. This is the case with all drive-screws having a point smaller than the circumference of the threads; and this is what the patented point was patented for obviating. If the screw im-

v.20.no.2-8

proved upon was the equivalent of the patented improvement, the patent would cover nothing. The patent is a quite narrow one, and this construction would undermine the whole of it.

The motion is denied.

FETTER and another v. OLIVER and others.

(Circuit Court, S. D. New York. April 23, 1884.)

PATENT-INJUNCTION.

In Equity.

Amos Broadnax, for orators.

Bakewell & Kerr, for defendants.

Wheeler, J. The motion in this cause for a preliminary injunction rests upon the same grounds, and is denied for the same reasons, as the motion for an attachment in Fetter v. Newhall, ante, 113. Motion denied accordingly.

MUNDY v. LIDGERWOOD MANUF'G Co.

Circuit Court, S. D. New York. April 23, 1884.)

PATENT-HOISTING-DRUMS-NOVELTY-INFRINGEMENT.

Reissued letters patent No. 9,289, for an improvement in friction drums for pile-drivers and hoisting-machines, although the friction surfaces claimed therein were anticipated by a previous patent, contain an element of novelty in the arrangement of the spring, and the patent is infringed by the use of a similar combination, including that kind of spring.

In Equity.

Edwin H. Brown, Frederic H. Betts, and Ernest C. Webb, for orator.

Livingston Gifford, for defendant.

Wheeler, J. This suit is brought upon reissued letters patent No. 9,289, dated July 13, 1883, the original of which was No. 158,967, dated January 19, 1875, granted to the orator for an improvement in friction drums for pile-drivers and hoisting-machines. The original had one claim; the reissue has three others, and this one, which is made the fourth, and is the only one relied upon. The defenses are lack of novelty and denial of infringement. The object of these inventions is to have a drum for the hoisting-rope which can be made to engage with, closely or loosely, and be released from, gearing in constant motion, so as to be started promptly but moderately,