

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, and made to move rapidly or slowly, and to stop gradually or quickly, and be left to turn the other way, at the pleasure of the operator. The orator accomplished this by providing a conical projection on the side of the gear-wheel next to the drum, of nearly the same diameter, made of wedge-shaped pieces of wood, with the broad ends outward, forming a tapering friction surface on the ends of the wood; and a circular flange projecting from the circumference of the drum,

loose on the same shaft, to fit tightly over the friction surface on the wheel when pressed toward it; and a spring coiled about the shaft, between the wheel and the drum, to separate the surfaces. The specification mentions a shell or flange on the side of the gear-wheel supporting the wood, and describes mechanism for pressing the drum towards the wheel and bringing the surfaces together. The claim is for the combination of the drum, loose, and the gear-wheel having the friction cone and side flange to support it and spring to repel it, fast upon the shaft, for this purpose. The defendant makes friction-drums like these in all respects, except that the wedge-shaped pieces of wood are bolted to the gear-wheel. Loose friction drums connecting with fast gear-wheels on the same shaft, with springs coiled about the shaft to repel them, and friction surfaces, one of metal, and the other of the ends of wood, for use for other purposes, were old and well known; and letters patent No. 150,765, dated May 12, 1874, were granted to John Knowlson, Jr., for improvements in similar apparatus, showing a gear-wheel with similar wedge-shaped pieces of wood, separated by radiating flanges on the side of the gear-wheel, presenting friction surfaces composed of the ends of the wood of each piece, and a drum with a similar projecting flange at each end to fit over the friction surfaces, and a wheel revolving with, but sliding along, the shaft at the other end of the drum, having a similar friction surface, with mechanism for pushing that along the shaft and bringing its friction surface in contact with that on that end of the drum, and thereby pressing the drum along and bringing the friction surfaces at the other end of the drum to a bearing, but without any springs to repel the friction surfaces. There is some contest as to which invention was first, Knowlson's or the orator's; but from the whole evidence it appears that Knowlson's was first accomplished.

It is strongly urged for the defendant that Knowlson's friction surfaces are substantially the same as the orator's; that there was no invention in putting the spring to the same purpose in the orator's devices that it had accomplished in prior similar devices; and that the orator really invented nothing but the shell or flange on the wheel for supporting the wood of the friction cone, which the defendants do not use. Apart from the mode of fastening the wood to the wheel, the friction cones of Knowlson perform the same functions in substantially the same way as those of the orator and of the defendant, although perhaps they would not wear so well as either. Each, however, may be considered for this purpose to be the mechanical equivalent of 116 the other. Then the orator is not entitled to a monopoly of this friction surface in such machines. It is said that beyond this he did nothing but to bring the spring of former machines into Knowlson's, which could be accomplished by the skill of good workmanship. Had this been all, the argument would be well founded. But he did more. One spring would not have answered to repel the friction surfaces in that machine; two would have been necessary, and of different power; one to repel the cone on the wheel not geared, and another and stronger to repel the drum and that from the gear-wheel. The orator dispensed with one of Knowlson's friction cones and flanges, rearranged and simplified the machine, and put the spring where it was needed or where he wanted it. This appears, after it was done, to have been easy to do; but no one did it before and it makes a more compact, economical, and useful machine. *Loom Co. v. Higgins*, 105 U. S. 580. The patent is for the new combination. It is further strenuously urged that the gear-wheel, with the cone, supported in the orator's peculiar manner, is one element of the combination, and that, as the defendant does not use that element, it does not infringe that combination. But the gear-wheel

and friction cone of the defendant are the equivalent in the combination to those of the orator, and by the use of them the defendant takes the orator's patented combination.

Let there be a decree for the orator for an injunction and an account, with costs.

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