

Joyce Vs. ChillicoThe Foundry

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Appeal No. : 127 U.S. 557

Appellant : Joyce

Respondent : ChillicoThe Foundry

Judgement :

Joyce v. Chillicothe Foundry - 127 U.S. 557 (1888)

U.S. Supreme Court Joyce v. Chillicothe Foundry, 127 U.S. 557 (1888)

Joyce v. Chillicothe Foundry

No. 149

Argued January 26, 1888

Decided May 14, 1888

127 U.S. 557

APPEAL FROM THE CIRCUIT COURT OF THE UNITED

STATES FOR THE SOUTHERN DISTRICT OF OHIO

SYLLABUS

Claim 1 of letters patent No. 154,989, granted to Jacob O. Joyce, September 15, 1874, for an improvement in lifting jacks, namely,

"A pawl for lever jack with two or more teeth, and adapted to move in inclined slots, grooves, or guides formed in the frame, substantially as described,"

must be construed as limited to a pawl which acts wholly by gravity, and not at all by a spring, to press it against the teeth of the ratchet bar.

Page 127 U. S. 558

Such claim is not infringed by a jack in which a spring is used to press the pawl against the teeth of the ratchet bar, and in which there are no slots, guides or grooves formed in the frame to guide the pawl.

In equity for the infringement of letters patent. Decree dismissing the bill. Complainant appealed. The case is stated in the opinion.

MR. JUSTICE BLATCHFORD delivered the opinion of the Court.

This is a suit in equity brought in the Circuit Court of the United States for the Southern District of Ohio by Jacob O. Joyce against the Chillicothe Foundry and Machine Works Company and F. M. De Weese, to recover for the infringement of letters patent of the United States No. 154,989, granted to Jacob O. Joyce, September 15, 1874, for an improvement in lifting jacks, on an application filed March 16, 1874.

The specification, claims, and drawings of the patent are as follows:

"Be it known that I, Jacob O. Joyce, of Carlisle Station, Warren County, Ohio, have invented certain improvements in lever jacks, of which the following is a specification:"

"My invention relates to the pawl of such jacks, and its objects are first, to substitute the weight of the pawl, sliding in inclined slots, grooves, or guides, for the elastic spring usually employed to press it against the teeth of the ratchet bar, and second, to obtain greater strength by dividing the load among several teeth of the pawl and ratchet bar instead of supporting it all on one tooth, as is commonly done."

"Figure 1 of the accompanying drawings is a vertical section of so much of a jack as is necessary to show my improvements, and Fig. 2 is a modification of the same in which the pins and slots of Fig. 1 are exchanged for the tongue and groove in Fig. 2. "

Page 127 U. S. 559

image:a

"Referring to Fig. 1, A is the pawl, having teeth that engage with the teeth of the ratchet bar B. D D' are slots in the frame of the jack, inclined to the axis of the ratchet bar at the angle of about forty-five degrees, in which slots move the pins C C' of the pawl A. The operation is seen at a glance. When the ratchet bar is raised, its teeth crowd or slide the pawl up the inclined slots

Page 127 U. S. 560

out of the way so as to allow it to pass, until it has traveled the length of a tooth, when the weight of the pawl causes it to fall back into the next tooth below, ready to hold the ratchet bar at the point gained, ready for another lift, and so on."

"In Fig. 2, instead of slots D D' there is a tongue D on each side of the pawl, with corresponding grooves in the frame of the jack, in which the said tongues move, or the tongues may be on the frame, with the grooves in the pawl, the tongues and grooves performing the same office that the pins and slots do in the form of construction shown in Fig. 1."

"Other modifications involving the same principle of operation may be possible, but I prefer the construction represented in Fig. 1, at the same time not limiting myself

strictly to that, but claiming any equivalent arrangement by which the same objects are accomplished in substantially the same manner."

"I claim as my invention --"

"1. A pawl for lever jack with two or more teeth, and adapted to move in inclined slots, grooves, or guides formed in the frame, substantially as described."

"2. The combination of the pawl A, with its pins C C', slots D D', and ratchet bar B, substantially as described."

Each defendant put in a separate answer alleging want of novelty and setting forth sundry prior patents in which it was averred the invention was contained, and also giving the names of sundry prior inventors. Each answer denied infringement. The answer of the company averred that it had made for its co-defendant parts of lifting jacks in accordance with letters patent of the United States granted to Samuel Mosler, No. 168,663, dated October 11, 1875; No. 172,471, dated January 18, 1876, and No. 194,711, dated August, 28, 1877. Issue was joined and proofs were taken on both sides, and the circuit court dismissed the bill, with costs. Its decision is reported in 15 F. 260.

In the opinion of the circuit court it is said:

"The specification describes and the drawings show a frame with parallel sides, between which a pawl moves in parallel slots in the frame, forming guideways inclined toward the vertically

Page 127 U. S. 561

moving ratchet bar. The pawl is provided with a series of teeth on the face adjacent to the ratchet bar, and at opposite sides, with projections or lugs engaging in the inclined slots of the frame. The guide slots are inclined at an angle of 45 degrees or thereabouts, and the pawl is actuated solely by gravity to move down the inclines, and engage its teeth with those of the ratchet bar, and the patentee states in his specification, as one of the objects of the invention, his purpose to utilize the gravity of the pawl itself, thus arranged, as a substitute for a

spring."

The clear statement of the specification in this respect is that the first object of the invention is

"to substitute the weight of the pawl, sliding in inclined slots, grooves, or guides, for the elastic spring usually employed to press it against the teeth of the ratchet bar."

The specification also says that

"when the ratchet bar is raised, its teeth crowd or slide the pawl up the inclined slots out of the way so as to allow it to pass until it has traveled the length of a tooth, when the weight of the pawl causes it to fall back into the next tooth below, ready to hold the ratchet bar at the point gained, ready for another lift, and so on."

These are plain statements that the weight of the pawl, unaided by any spring, is to be used to cause the pawl to fall back into the next tooth below after the ratchet bar has traveled the length of a tooth, such weight of the pawl being employed to press it against the teeth of the ratchet bar in place of the use of an elastic spring for that purpose. The inclined slots, grooves, or guides formed in the frame, in which the pawl moves, are the slots D D', made in the frame of the jack and "inclined to the axis of the ratchet bar at the angle of about forty-five degrees," in which slots the pins C C' of the pawl move. The specification states that instead of such slots in the frame of the jack, there may be grooves in such frame, one on each side of the pawl, in which a tongue on each side of the pawl moves, or there may be tongues on the frame and grooves in the pawl, the tongues and grooves performing the same office that the pins and slots do in the first form of construction.

In the opinion of the circuit court, the following statement

Page 127 U. S. 562

is made as to the defendants' jack, which we deem to be correct:

"The defendants manufacture a jack having a many toothed pawl resting at its bottom upon a seat slightly inclined toward the rack bar and actuated by a spring placed behind it within the frame. The inclination of the seat is not sufficient to actuate the pawl by gravity, nor are there any slots or other means of guiding the pawl in the sides of the frame, the function of the inclined seat being rather to assist the spring in preventing a backward slip of the pawl when under pressure than to facilitate the forward movement of the pawl, although to the latter result it may contribute in a slight degree."

The plaintiff claims that the defendants use their spring to start the movement of the pawl upon an incline having a less angle than that mentioned in the specification of the patent, and employ an inclined seat for the pawl to effect the holding of the load, and that they thus infringe the first claim of the patent. But we are of opinion, upon the whole evidence, that in the defendant's jack, the spring is used to press the pawl against the teeth of the ratchet bar within the meaning of the specification of the patent; that the jack made by the defendants would not be and is not, as constructed by them, and put upon the market, a practically operative instrument without the use of the spring; that the pawl in it will not operate by gravity alone so as to make it an efficient or safe machine, and that there are no slots, grooves, or guides formed in the frame to guide the pawl in the sense of the first claim of the plaintiff's patent.

We concur with the court below in holding that the first claim of the patent must be limited to a pawl moving by gravity alone in inclined slots, grooves, or guides formed in the frame, and that therefore there has been no infringement of the first claim.

It is not alleged that the second claim has been infringed.

The decree of the circuit court is affirmed.