

## Syllabus.

announced by the Supreme Court of Illinois in *Johnson v. People*.

We are of opinion that no error was committed in dismissing the bill, so far as it questioned the authority of the State officers to assess, levy, and extend taxes in payment of the bonds held by the appellee Graves.

The decree is, consequently, affirmed. *It is so ordered.*

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ZANE & Another v. SOFFE.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE  
SOUTHERN DISTRICT OF NEW YORK.

Argued October 24th, 1883.—Decided January 21st, 1884.

*Evidence—Patent.*

1. A patent was issued June 22d, 1865, to one Jennings (and subsequently assigned to appellants), for an improvement in self-acting cocks and faucets. The first claim was for a "screw follower H in combination with the valve of a self-closing faucet, substantially as set forth, and for the purpose described." This screw follower was a round stem "provided with a coarse screw thread or threads." It projected upward through the faucet, and terminated in a handle for the purpose of turning it downward to let on the water. At its lower end it rested upon a valve, which was supported by a spiral spring, the object of this spring being to keep the valve closed when the pressure was removed. It appearing that for ten or fifteen years before the date of J.'s patent B. had manufactured and sold faucets in which an inclined plane or cam was used as a means of producing the result upon the valve stem which was produced by J.'s screw: *Held*, That J.'s 1st claim must be limited to a screw follower, and could not be construed to embrace an arrangement for moving the valve.
2. Since the decision in *Loom Company v. Higgins*, 105 U. S. 580, it is *Held*, That under a general denial of the patentee's priority of invention, evidence of prior knowledge and use, taken without objection, is competent at the final hearing, not only as demonstrative of the state of the art, and therefore competent to limit the construction of the patent to the precise form of parts and mechanism described and claimed, but also on the question of the validity of the patent.

Bill in equity, setting forth an infringement of a patent for

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self-closing cocks or faucets, and praying for a perpetual injunction, for an account for the payment of damages, and for a temporary injunction. Answer, denying the infringement and averring in substance that for ten or fifteen years prior to plaintiff's patent, a mechanism similar to that described in it had been in public use in New York and Brooklyn for purposes similar to those set forth in it. Decree below for defendant, from which plaintiffs appealed.

*Mr. Thomas William Clarke* for appellants.

*Mr. Henry P. Wells* for appellee.

MR. JUSTICE BRADLEY delivered the opinion of the court.

This writ was brought by Zane and Roach, as assignees of one Nathaniel Jenkins, against the defendant, Soffe, for infringing (as charged) certain letters patent granted to said Jenkins, June 22d, 1865, for an improvement in self-acting cocks or faucets.

The general features of the invention patented, so far as material to be considered, may be described as follows: The valve is situated in a chamber below the valve-seat, where the water is introduced by the induction-pipe and is kept in place against the valve-seat by a spiral spring underneath resting on the bottom of the chamber; on its upper side the valve is connected by a swivel with a stem which projects upward through the top of the faucet, where it is provided with a handle by which it may be turned; a screw is formed on the upper part of the stem, by which, when the stem is turned by the hand, it is forced downward and pushes the valve from its seat, thus permitting the water to flow out of the cock; on letting the handle go, the spiral spring below the valve, aided by the pressure of the water, forces the valve back to its seat, and the flow of water is stopped. In the specification the stem is called a screw follower. The patent has two claims, only the first of which is claimed to be infringed by the defendant, and this is in the following words, to wit:

"What I claim as new and desire to secure by letters patent is,



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first, the screw follower H in combination with the valve of a self-closing faucet, substantially as set forth, and for the purpose described."

The defendant answered the bill, denying that Jenkins was the first inventor of the thing patented, denying infringement, and setting up a patent granted to defendant himself on the 10th of May, 1874, under and according to which the faucets manufactured by him were made, and which he alleges are no infringement of the Jenkins patent. The answer specifically refers to only one patent as anticipating the supposed invention of Jenkins, namely, a patent granted to one Frederick H. Bartholomew, in August, 1846, in which (as alleged) all the essential elements of the faucet patented to Jenkins are described and exhibited. The answer, however, contains the following general averment :

"This defendant, further answering, denies that the patent granted said Nathaniel Jenkins is valid ; and alleges that prior to the invention described in said patent, a screw and spring, worked in opposition to each other, had been used to open and close faucets and hydrants, in which faucets and hydrants the screw did all the work of opening the faucets and hydrants, and the spring did all, or most, of the work of closing the valve of the faucets and hydrants. That faucets and hydrants operated in the above manner had been in public and general use and for sale in the cities of New York and Brooklyn, and in various other places long prior to, and at least fifteen years before, the date of the alleged invention of Nathaniel Jenkins ; and defendant is advised and believes that, by reason of said prior public use and sale, the patent granted to said Jenkins is invalid."

This answer was not excepted to, and evidence was given by the defendant, without objection, showing that a large number of faucets and hydrants were made by Bartholomew and publicly used in the city of New York several years before the issuing of the patent sued on, differing in some respects from the specific device described in Bartholomew's patent, referred to in the answer, but relied on as anticipating the alleged in-

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vention of Jenkins, or, at least, as containing all the essential elements of the faucets manufactured by the defendant.

The court below held that this evidence was competent to show the state of the art at the time Jenkins's patent was granted, and might be used for the purpose of limiting its construction, but not for the purpose of showing such a previous knowledge and use of the invention as would affect the validity of the patent. But since the decision of this case in the Circuit Court, we have held, in *Loom Company v. Higgins*, 105 U. S. 580, that under a general denial of the patentee's priority of invention, evidence of prior knowledge and use taken without objection is competent at the final hearing on the question of the validity of the patent. And, since in the present case there was neither an exception to the answer nor any objection to the evidence, except as to a single faucet marked Defendant's Exhibit No. 2 (which may be laid out of the case), we think that the remaining evidence of prior knowledge and use might well have been considered by the court on the question of priority as affecting the validity of the patent.

Viewing the evidence, however, with the court below, only as demonstrative of the state of the art, and therefore competent to limit the construction of the patent to the precise form of parts and mechanism described and claimed therein, it was amply sufficient to sustain the decree.

Self-closing cocks and faucets were no new thing in June, 1865, when the patent of Jenkins was issued. Bartholomew had manufactured and sold them for a period of ten or fifteen years before that time. As early as 1854, he had made and sold faucets in which the valve was kept on its seat by the pressure of a spiral spring, and when a flow of water was desired, the valve was lifted from its seat against the force of the spring by means of a stem, operated by a collar or cross-piece moving around on a fixed circular inclined plane or cam, having the same effect as a screw; when the handle, or thumb-piece, attached to the collar was liberated or let go, the spiral spring would force the valve back to its seat, and the flow of water would be stopped.

The improvement of Jenkins (or what was patented to him

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as such), as we have seen, was the employment of a screw on the upper part of the valve stem, in lieu of the circular cam or inclined plane, to force the valve from its seat. This valve stem, called by him the screw follower, forced the valve not only against the pressure of the spring, but against that of the water, both of which were exerted in carrying the valve back to its seat as soon as the force operating upon the screw was removed. Now, in view of the fact that an inclined plane or cam was previously used by Bartholomew as a means of producing the same result upon the valve stem as that produced by the screw made upon it by Jenkins, it is clear that the claim of the latter in his patent, of "the screw follower H in combination with the valve of a self-closing faucet, substantially as set forth," must be limited to the precise form of mechanism designated. It must be limited to a screw follower, and cannot be construed to embrace a cam arrangement for moving the valve. Whether it is also to be limited to a valve which moves to its seat concurrently with, and not against, the pressure of the water, it is not necessary to determine. The limitation to the screw is sufficient to determine this case. In the faucet manufactured by the defendant the screw is not used, but the old cam device is employed for lifting the valve from its seat. It is true that the cam, instead of being placed at the top of the stem, on the outside of the faucet, as was done by Bartholomew, is placed at its lower extremity, by the valve, inside of the faucet; but this does not change the principle of its construction or operation. We concur with the court below in holding that, construed as the patent of Jenkins must be in view of the state of the art at the time of its issue, the defendant has not infringed it, and the bill of complaint was properly dismissed.

*The decree of the Circuit Court dismissing the bill is, therefore, affirmed.*