ALLEN v. GRIMES.

(Circuit Court, D. Indiana. November 1, 1898.)

No. 9,365.

1. PATENTS—NOVELTY OF DEVICE—UTILITY.
The superior utility of a mechanical device is always a circumstance entitled to some weight on the question of its novelty.

2. SAME—COMBINATION OF OLD ELEMENTS.
That a mechanical device consists of a combination of elements, all of which are old, does not conclusively prove want of novelty.

3. SAME—RULE OF CONSTRUCTION.
In construing the specification and claims of a patent, it is the duty of the court to read them in the light of the conditions and usages prevalent at the time they were written in the art to which the invention relates.

4. SAME—DEVICE FOR PUMPING OIL WELLS.
The Allen patent, No. 328,099, for a device for converting motion in oil-pumping apparatus, covers a combination of elements in a mechanical device possessing both novelty and utility.

This is a suit in equity by George Allen against George W. Grimes for the infringement of a patent.

Kay & Totten and Charles Martindale, for complainant.
Chester Bradford, for defendant.

BAKER, District Judge. This is a suit for the infringement of letters patent No. 328,099, issued to the complainant October 13, 1885, for a device for converting motion in oil-pumping apparatus. The sole question argued and presented for decision is the patentability of the device. Its patentability is contested on the ground that it lacks both novelty and utility. It is not contended that the defendant is not an infringer, if the complainant's device involves invention. The patent relates to a device for pumping a number of oil wells from a central power; its object being to provide a cheap, simple, and efficient pumping apparatus for simultaneously pumping a number of oil wells, at whatever distance or in whatever direction they may be located from the central power. Its further object is to provide a device to which the wells may be connected or coupled in such manner that, as far as possible, one well will balance another; thus reducing the power and strain of the machinery, while the length of the pumping stroke may be varied as desired by varying the throw of the eccentric. The invention is limited by the language of the patent to the art of simultaneously pumping oil from numerous wells variously located,—an art which is shown to involve conditions and difficulties peculiar to itself. The patent contains two claims, as follows:

"(1) The combination, with an upright shaft and means for rotating it, of an eccentric rigidly secured on the shaft, a strap or ring mounted on the eccentric, and pump-actuating rods attached to the strap or ring, substantially as set forth. (2) The combination, with an upright shaft and means for rotating it, of one or more eccentric disks or wheels secured on the shaft, straps or rings loosely mounted on the eccentrics, and pump-actuating rods secured to the straps or rings, substantially as set forth."

The validity of this patent was upheld by Judge Acheson in the circuit court of the United States for the Western district of Pennsylvania in an opinion filed February 25, 1895. I adopt, as accurate, the

description of the invention found in the opinion of Judge Acheson, as follows:

"The invention consists of an upright driving shaft, to which are rigidly secured one or more eccentrics, each provided with a strap or ring loosely mounted thereon, and pump-actuating rods attached to and so engaging with the eccentric strap or ring that a reciprocating motion is imparted to all the rods, from whatever directions they may lead."

The defense most insisted upon is that the invention lacks novelty, in view of the prior art, and that it is anticipated by former patents shown in the record. Considerable testimony has been introduced on the question of the utility of the patented device. In my opinion, the great weight of the evidence shows its utility. I have read the entire record with care, and I entertain no doubt that the device is one of great practical utility in the art to which it relates, and that it is superior to any other device in use, in cheapness, durability, efficiency, and simplicity. It is insisted, however, that, if the device does possess superior utility, this would not show that it possessed patentable novelty. This is true, but still the superior utility of a mechanical device is always a circumstance entitled to some weight on the question of its novelty. It is undoubtedly true, as claimed by the defendant, that every element of the combination found in the patent in suit is old; but this does not conclusively settle the question of its novelty. The vertical shaft, the eccentric, the ring or strap surrounding it, and rods or arms for communicating motion, were all old in the mechanical art. The use of an eccentric for the conversion of rotary into reciprocating motion was old and familiar in numerous devices, and ordinarily for such a purpose a crank was the equivalent of an eccentric. But in no prior device in evidence was an eccentric ever used, or capable of being used for any purpose to which the device was adapted, without having at least one of its actuating arms rigidly attached to the eccentric in such manner as to control and limit the movement of the ring or strap. The eccentric had, so far as the evidence discloses, never been adapted to use, except in connection with an arm rigidly fastened to the ring or strap, so that a thrust and pull were alternately given. It was familiar knowledge long before the complainant made his invention that in pumping oil wells no push or thrust was needed, or, indeed, could be used. The weight of the pump valves, the sucker rods, and the column of oil and water resting on the valves had always been relied upon to effect the downward movement of the pump. Hence nothing was needed, in pumping oil wells, but means to pull up the pumping apparatus. For this purpose flexible wooden rods, old sucker rods, wire ropes, etc., had been in common use. It was familiar to all engaged in the oil industry that no stiff or rigid pump-actuating rods were used, or could be used, and that any means which would pull up the pumping apparatus was sufficient. The problem presented to the complainant was this: Can flexible rods, incapable of giving a thrust, or of controlling or limiting the movement of the eccentric ring, be attached to one or more eccentric rings for the purpose of raising oil-pumping mechanism? This had never been accomplished before, either in oil or water pumps. It was not known, prior to the complainant's inven-

tion, that flexible rods in connection with eccentric rings or straps were capable of being used for the purpose of pumping oil wells. Such use of flexible rods in connection with eccentric rings was a new conception,—a happy thought,—to which the complainant gave bodily form in the device in suit. To combine old elements so that they accomplish a new and useful result,—something which no one ever before conceived such combination could accomplish,—in my opinion, constitutes invention. Judge Acheson, in his opinion, well says:

"Now, it is true that the eccentric itself was a well-known and common device to convert a rotary into a reciprocating motion; as, for example, in operating the slide valves of steam engines. It was also old to use an eccentric on a horizontal shaft to operate a single pump for pumping water, and two eccentrics had been so used on the same shaft. Nevertheless the combination of the patent was new. Nor did its novelty consist simply in the employment of a vertical shaft instead of a horizontal one. The eccentric strap or ring of the patent is loosely mounted. This is a new and material feature. The evidence is that in all prior uses of the eccentric the strap or ring was rigidly connected with the rod or pitman, and positively controlled thereby. The eccentric disk or wheel itself was, of course, free to turn within its ring; but the latter was firmly attached to, and rigidly held by, the pitman, and thus was required to move in a fixed course. But it is not so, and must not be so, with the eccentric ring of the patent. Here the loose mounting of the eccentric ring leaves it at liberty to swing freely with relation to the rods attached to it, and thus enables the eccentric to impart reciprocating motion to numerous pump-actuating rods, wherever they may be connected with the ring, and in whatever directions they may lead."

The new devices and the additional evidence introduced in this case, in my opinion, present the question of invention in no different aspect from that in which it was presented to Judge Acheson. The Corliss pumps and the Weirick and Lathrope apparatus employ eccentrics with one rigid arm, and they were incapable of successful operation without it. Apparently, the conception never occurred to them that an eccentric could be used without a rigid arm or pitman to control and limit the movement of the eccentric ring. The complainant was the first to whom this conception occurred, and he first reduced it to practice. His invention embodies a new idea of operative means. While the specification and claims are not happily worded, applying to them the maxim which must be applied, "Ut res magis valeat quam pereat," I am of opinion that the inventor ought not to be deprived of the fruits of his invention by reason of the insufficiency of his specification and claims. In construing the specification and claims, it is the duty of the court to read them in the light of the conditions and usages prevalent at the time they were written in the art of simultaneously pumping numerous oil wells, variously located. Thus read, the meaning of the phrase, "a ring or strap loosely mounted on the eccentric," and "pump-actuating rods," would be readily understood by those skilled in the art. All pump-actuating rods used in pumping oil wells were flexible, and were not rigidly attached to the mechanism which immediately communicated a pulling motion to the pumps. Therefore, in order that a ring or strap should be loosely mounted on the eccentric, those skilled in the oil-pumping art would understand that the actuating rods must be flexible, and must not be rigidly attached to the ring or strap. The words "loosely mounted" would not be understood to mean simply that a ring or strap

was so mounted as to be held in place by its own weight, or that the eccentric simply moved freely within the ring or strap. These words were manifestly used to mark the distinction between the movement of such ring or strap when a rigid arm or pitman was rigidly secured to it, whereby the movement of the ring or strap would be positively controlled and limited by such arm or pitman, and the movement of a ring or strap when a flexible rod was pivotally secured to it, whereby it would swing freely with relation to the rods attached to it. In my opinion, the patent ought not to be held void for uncertainty, nor ought it to receive such a construction as would deny to the patentee the benefit of his invention. Let a decree be drawn in favor of the complainant.

THE BRITISH KING.

(District Court, S. D. New York. July 29, 1898.)

CARGO-DAMAGE—SEAWORTHINESS—LEAK IN BALLAST TANK—HEAVY WEATHER—SLUICE-VALVE IN BULKHEAD NOT WATERTIGHT—INATTENTION TO PUMPS—HARTER ACT—MANAGEMENT OF THE SHIP.

Chemicals and rags being damaged by sea water from leaks in a steamer's ballast tank, which was found sprung and the rivets started and broken after heavy weather; *held*, upon evidence of first-class construction, careful inspection and good stowage, that the leak was sufficiently explained by the heavy weather that preceded it, and that the vessel was seaworthy; also *held* (2) that lack of proper attention to the pumps, which might have earlier disclosed the leak and prevented the damage, was negligence in the "management of the ship," for which the ship was not liable under the Harter act; also *held* (3) upon proof that the sluice-valve in the bilges connecting compartments 4 and 5 was not watertight, that this fact did not constitute unseaworthiness, even if it existed at the commencement of the voyage, because not a failure in any necessary requirement, and because any leak therefrom would be sufficiently guarded against by proper attention to the pumps. The complaint was therefore dismissed.

Conway & Westwood, for libelant.
Convers & Kirlin, for claimant.

BROWN, District Judge. The above libel was filed to recover for the damage to certain barrels of chemicals and to some rags stowed in the lower hold, compartments 4 and 5, of the steamship British King, on a voyage from Antwerp to New York in December, 1897. The damage was caused by water leaking from the water ballast tank in compartment No. 5, and thence through the sluice-cock into compartment No. 4 whereby the cargo in both compartments was injured. On examination of the ballast tank after arrival in New York the tank was found somewhat sprung, some of the rivets in each side were started, some broken, and one upper edge seam a little open. The libel charges that the tanks were weak and unfit on leaving Antwerp, and that the steamer was unseaworthy in that regard. The answer alleges that the ship on sailing was in all respects seaworthy, and that the damage arose from the straining of the vessel and consequent injury to the tank in extraordinary weather on the night of April 20th.