

difference between a rigid attachment and a jointed and flexible attachment to the axle has a reality with relation to this invention which is lacking in the other alleged differences, but the difficulty with that part of the defendants' case is that the Short device is an improvement upon the Sprague invention, which was of a broader character than the defendants interpret it to have been.

Claim 9 requires a spring support for the axle end of the motor from the truck or body of the vehicle. The specification says that the springs, known as "springs M," extend to crossbars on the truck frame, or to the car body, in case no truck is used. The spring supports on the axle end of the defendants' motor are from the car axle. It is true that the car axle is held in the truck, but the claim made it imperative that the support for that end must be from the truck or body of the vehicle, and the specification describes the same method of construction. We think that claim 9 was not infringed.

The decree should be modified, with costs of this court to the appellants, by limiting the injunction and the accounting to claims 2 and 6; and the case is remanded to the circuit court, with directions to enter a modified decree in accordance with the foregoing opinion, with costs of that court.

UNION GAS-ENGINE CO. et al. v. DOAK.

(Circuit Court, N. D. California. May 10, 1898.)

No. 11,947.

1. PATENTS—SUBJECTS OF PATENT.

It is not the result attained which is patentable, but the device or mechanical means by which that result is secured.

2. SAME—ANALOGOUS USE.

There is no invention in adapting the prior devices for igniting gaslights by an electric spark, by what is known as the wiping or reciprocating movement, to the ignition of gas in the explosion chambers of gas engines. The changes required involve mere mechanical adaptations, obvious to the skilled workman.

3. SAME—GAS ENGINES.

The Barrett & Daly patent, No. 430,505, for an improvement in gas engines, consisting in mechanism for igniting the gas by means of an electric spark, is void, because of anticipation and want of novelty.

This was a suit in equity by the Union Gas-Engine Company, Mora M. Barrett, and John F. Daly against John E. Doak for alleged infringement of a patent for an improvement in gas engines.

John H. Miller, for complainants.

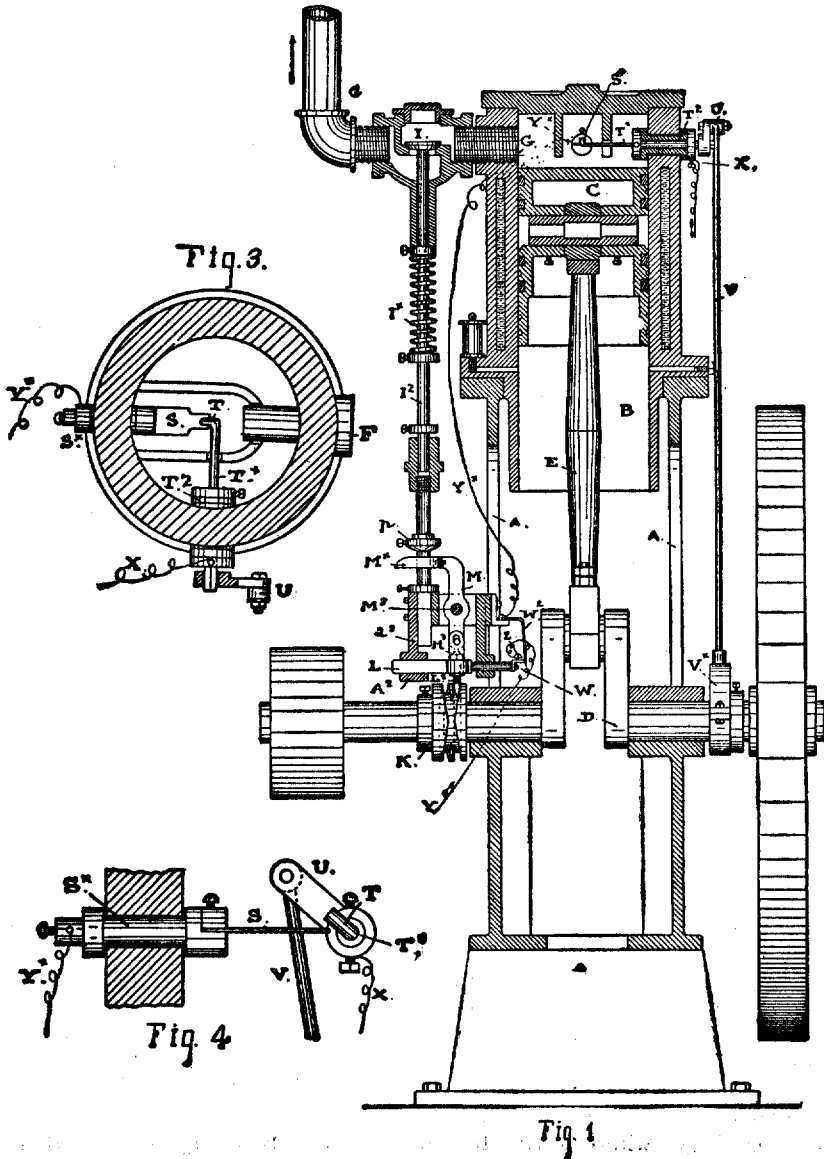
John L. Boone, for defendant.

MORROW, Circuit Judge. This is a suit for the infringement of letters patent No. 430,505, issued on June 17, 1890, to Mora M. Barrett and John F. Daly. The Union Gas-Engine Company, one of the complainants, appears to be the successor in interest of all the rights, title, and interest of the Pacific Gas-Engine Company, to whom the patentees, Barrett and Daly, had assigned their patent. The patent was issued for a new and useful improvement in gas engines. The improvement consists in a device or mechanism for

igniting the gas used in gas engines, by means of an electric spark. In their specification, the patentees thus describe the invention:

"The present improvements are applied to gas engines of the upright kind, and they relate to novel valve mechanism for operating the exhaust valve, to a novel electric ignitor on an open circuit for exploding the charges of gas in the cylinder, and, in connection therewith, a current interrupter adapted to break the circuit at every alternate revolution of the crank shaft."

Then follows a description of the improvements with reference to the drawings accompanying the specification.



That part which relates to the claims alleged to have been infringed is as follows:

"S and T are the two electrodes or contact points of the ignitor. The part S is a flexible yielding tongue of metal fixed at one end in an insulated plug, S*, and setting through the side of the cylinder into the space above the piston; and the part T is a finger or projection on a short rock shaft, T*, that sets through and has movement in an insulated bearing, T², in the side of the cylinder. Rocking movement is given to this shaft by an arm, U, on the outer end of an eccentric rod, V, and an eccentric, V*, fast on the crank shaft. The finger, T, sets in line with and in close relation to the free end of the yielding tongue. By the rocking movement of the shaft it is pressed against and drawn over the end of the tongue with a wiping movement, first in a downward direction, and then in an upward direction, with equal pressure in both movements. One wire from the battery being connected at X to the rock shaft, and the other one, at Y*, to the tongue, the circuit is closed, and then broken, by the contact of the rock-shaft finger with the tongue, and the subsequent separation when the finger clears the tongue. As thus constructed for operation, this ignitor is found to produce a better quality of spark than is usually made by contact points or electrodes that work with a simple contact without a rubbing or wiping movement of one upon the other. The yielding tongue also retains its shape for a much longer time than the tongues or springs in other ignitors of the kind where the contact and pressure of one part against the other is from one side or in one direction only. In connection with these parts, provision is made for cutting off the current at every alternate upstroke of the piston when contact between the two electrodes is made; but no spark is required, the object of which is to prevent waste and economize the battery power. * * *

Four claims are made, of which the second and third are in controversy. Claim No. 2 is as follows:

"An electric ignitor for gas engines, consisting of a flexible tongue forming one electrode or terminal, and an oscillating finger forming the other terminal, and adapted by its movements to act with a wiping movement against the flexible terminal, first in one direction, or downward, and in the contrary direction."

Claim No. 3 is as follows:

"The combination of the yielding tongue, S, shaft, T*, carrying a finger or projection, and mechanism giving said shaft rocking movement, by which the finger is drawn against and off the end of the yielding tongue first in one direction, and then in the contrary direction."

The specification, claims, and testimony introduced in the case show that the improvement claimed consists in a mechanism which produces what is termed a wiping or reciprocating motion; that is, one electrode, which is fixed to the shaft, wipes or rubs against the flexible and yielding electrode, thereby producing an electric spark, which ignites the gas in the explosion chamber of a gas engine, causes an explosion, and furnishes the motive power. According to one of the witnesses, "the wiping spark is when one electrode comes in contact with the other, and then is broken with a wiping or rubbing motion." The advantage of the wiping motion over other movements is that the electrode is always clean, and the current passes better, and creates a bigger spark. There are two wiping or rubbing movements, one rotating, and the other reciprocating; that is, moving back and forth. Another advantage of the reciprocating movement over the rotating one is that it has a tendency to keep the spring to which the flexible and yielding electrode is attached straight, thereby prolonging the period of its serviceability, whereas the tendency of the rotating movement is

that the flexible and yielding electrode is habitually bent in one direction, thereby softening it; and it becomes more and more bent until the contact electrodes fail to touch, from which it must result that no spark can be produced. In short, the value of the improvement consists in the device which produces the wiping movement, instead of the rotating movement, with the results above set forth.

The defendant, in his answer, sets up anticipation and want of invention. He relies upon the following prior patents to support the first defense, viz.: (1) Reissued United States letters patent No. 9,846, dated August 23, 1881, issued to J. P. Tirrell and George T. Pinkham, entitled "Apparatus for Lighting and Extinguishing Gas by Electricity"; (2) United States letters patent No. 272,004, issued to H. J. Warren, dated February 6, 1883, entitled "Electric Gas-Lighting Burners"; (3) United States letters patent No. 333,336, dated December 29, 1885, issued to Daniel S. Regan; (4) United States letters patent No. 368,445, dated August 16, 1887, issued to Cyrus W. Baldwin; (5) United States letters patent No. 387,167, dated July 31, 1888, issued to Julig & Ewald; (6) British letters patent No. 4,736, of 1884; (7) British letters patent No. 11,448, of 1888; (8) German patent No. 43,446. These patents all throw light upon the state of the art with respect to the ignition of gas by means of electric sparking, and the application of this principle to the ignition of gas in gas engines. The patent issued to J. P. Tirrell and George T. Pinkham, No. 9,846, on August 23, 1881, and denominated "Apparatus for Lighting and Extinguishing Gas by Electricity," shows that the idea of igniting gas by electric sparking produced by a wiping or reciprocating motion between two electrodes was well known and understood, and, as applied to the lighting of gas used in houses, streets, etc., worked successfully. The patent issued to Henry J. Warren, No. 272,004, on February 6, 1883, for an improvement in electric gas-lighting burners, further exemplifies and illustrates this idea of electrical sparking produced by a reciprocating or wiping movement, as above stated. There was nothing new, therefore, in the application of the principle of electric sparking to the ignition of gas used as a motive power in gas engines. But it is a well-established doctrine of the law of patents that it is not the result attained by a patentable device or mechanism which is patentable, but that the subject of a patent is the device or mechanical means by which the desired result is secured. *Carver v. Hyde*, 16 Pet. 513, 519; *Le Roy v. Tatham*, 14 How. 156; *Corning v. Burden*, 15 How. 252; *Burr v. Duryee*, 1 Wall. 531; *Fuller v. Yentzer*, 94 U. S. 288; *Knapp v. Morss*, 150 U. S. 221, 14 Sup. Ct. 81.

As stated above, the improvement claimed for the complainant's patent consists in the wiping movement, back and forth; also called the "reciprocating motion." The superiority of this improvement in an electric sparking igniting mechanism for gas engines over other devices which have rotating movements is supported by the evidence, and, for the purposes of the case, may be taken as established. But the fact remains that the wiping or reciprocating movement devised to ignite gas issuing from a gas jet is substantially the same as that which complainants claim for the ignition of gas

in the explosion chamber of gas engines. There is no material difference between the two. The only difference is that one is adapted to operate on a gas jet, and the other in the explosion chamber of a gas engine. In both instances, the movement, the process of operation, and the result are the same. It may well be that the simple mechanism attached to a gas jet is sufficiently effective for the purpose of igniting gas issuing from a gas jet, and that the same mechanism placed in the explosion chamber of a gas engine would be practically ineffective and useless for want of proper mechanical adaptation. But such change in the mechanism as is necessary to make the device attached to a gas jet adaptable to the explosion chamber of a gas engine, and thereby conserve the wiping or reciprocating motion, is purely a mechanical adaptation, and does not, in my opinion, require any inventive faculty. It appears to be a matter which any skilled and trained mechanic could easily accomplish, and the testimony introduced tends to support that view of the case. It is well settled that, where the public has acquired the right to use a machine or device for a particular purpose, it has the right to use it for all like purposes to which it can be applied, unless a new and different result is obtained by a new application of it. *Blake v. City and County of San Francisco*, 113 U. S. 679, 5 Sup. Ct. 692. If what the device claimed as an improvement in this case performs is essentially the same as that performed by the gas-jet devices referred to, and the structure, operation, idea, and result of the latter are such as would suggest to the mind of an ordinarily skillful mechanic their adaptation to a gas engine for the same purpose and by substantially the same means, this adaptation is not a new invention, nor such an improvement as would entitle it to be regarded as an invention, and is not patentable. *Tucker v. Spalding*, 13 Wall. 453; *Blake v. City and County of San Francisco*, 113 U. S. 679, 5 Sup. Ct. 692. In *Pennsylvania R. R. v. Locomotive Engine Safety Truck Co.*, 110 U. S. 490, 494, 4 Sup. Ct. 220, 222, Mr. Justice Gray, speaking for the court, said:

"It is settled by many decisions of this court, which it is unnecessary to quote from or refer to in detail, that the application of an old process or machine to a similar or analogous subject, with no change in the manner of application, and no result substantially distinct in its nature, will not sustain a patent, even if the new form of result has not before been contemplated,"—citing *Hotchkiss v. Greenwood*, 11 How. 248; *Phillips v. Page*, 24 How. 164, 167; *Jones v. Morehead*, 1 Wall. 155, overruling *s. c.*, nom. *Livingston v. Jones*, 1 Fish. Pat. Cas. 521, Fed. Cas. No. 8,413; *Hicks v. Kelsey*, 18 Wall. 670; *Smith v. Nichols*, 21 Wall. 112; *Brown v. Piper*, 91 U. S. 37; *Roberts v. Ryer*, 91 U. S. 150; *Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U. S. 274, 276; *Machine Co. v. Keith*, 101 U. S. 479, 491; *Pearce v. Mulford*, 102 U. S. 112; *Heald v. Rice*, 104 U. S. 737, 754-756; *Atlantic Works v. Brady*, 107 U. S. 192, 2 Sup. Ct. 225.

The other prior patents introduced in the case not only confirm this view of the case, but show that the idea contained in the Barrett and Daly patent, viz. the wiping movement, had been anticipated, and, further, convince me that the mere change in the igniting device from a rotating motion to a reciprocating movement is purely a question of mechanical skill. It appeared affirmatively in evidence that the number of sparks would be the same, only one spark being deemed expedient in the movement. Furthermore, as tending to show the

mechanical nature of this wiping movement in place of the rotating motion, it appears from the testimony in the case that at least four gentlemen, all more or less familiar with and experienced in electrical sparking devices, have devised mechanism or devices which contain the same wiping or reciprocating motion. This fact strongly confirms the opinion I hold that the mere change of motion, claimed as an improvement by the Barrett and Daly patent, from the rotating to the reciprocating movement, involved only mechanical skill, and did not require any peculiar inventive genius. As was said by Acheson, Circuit Judge, in *Haslem v. Plate-Glass Co.*, 68 Fed. 479, the fact that "three skillful mechanics, * * * acting independently of each other, suggested the duplication of the orbicular beam, * * * is a circumstance that furnishes persuasive evidence that the change was obvious to the skilled mechanic." See, also, in this connection, *Atlantic Works v. Brady*, 107 U. S. 192; 2 Sup. Ct. 225. Upon the whole of the case, I conclude that the Barrett and Daly patent, No. 430,505, issued June 17, 1890, has been in effect anticipated, and is void for want of novelty. The bill will be dismissed, at complainants' costs.

WHITMIRE v. COBB.

(Circuit Court of Appeals, Fifth Circuit. May 24, 1898.)

No. 659.

1. SALVAGE—WHEN ALLOWED.

Timber found drifting with the tide, on deep water, in a harbor, and out of control of the owners, is the subject of salvage.

2. SAME—AMOUNT OF RECOVERY.

Upon proof that the public custodian of lost timber, who himself was entitled to demand 75 cents per stick for timber recovered, paid regularly to salvors 50 cents per stick for timber turned over to him, the court allowed a salvor 50 cents per stick as against the owner of the timber. *Held* no abuse of discretion.

Appeal from the District Court of the United States for the Northern District of Florida.

On July 7, 1896, a storm swept over the western part of Florida, taking in its course the mouths of Escambia River and Escambia Bay, an arm of Pensacola Bay. At Ferry Pass, on one of these mouths of the river, there were several thousand sticks of timber gathered together which were cast adrift by the storm, and carried by the wind and tide out into the waters of Escambia Bay. Two hundred and forty-one of these sticks, scattered along the eastern shore of Escambia Bay near Garcon Point, for a distance of one and one-half miles, were collected together by the appellee, N. H. Cobb, assisted by his three children and one man. According to his statement, Cobb worked three days in gathering two hundred pieces, and collected the balance during a period of two weeks' time. The man employed by Cobb to assist him worked one-half day. The timber was afterwards taken by Whitmire, the appellant. Thereupon the appellee filed a libel against the timber in the United States district court for the Northern district of Florida. Whitmire interposed a claim and filed his answer. Upon the hearing upon the merits the district judge awarded Cobb, the appellee, the sum of \$120.50, or 50 cents per stick, as salvage, and the costs. From this decree Whitmire appeals to this court, assigning error as follows: "The district judge erred (1) in rendering a decree for the libellant; (2) in rendering a decree for so much as the