## American Road-Machine Co. v. Pennock & Sharp Co.1

(Circuit Court, E. D. Pennsylvania. November 11, 1890.)

PATENTS FOR INVENTIONS—VALIDITY—COMBINATION—INVENTION.

The novelty claimed in plaintiff's patent was the combination with a common form of road-making machine of momentum wheels, adapted to act as a balance against the weight of the blade-lifting device. Smaller and lighter wheels had been used in a similar combination in road-making machines, and wheels operating by their inertia to store up power from the easier part of the operation to be expended during the more difficult were old, and had been used in fly-wheels, capstan-wheels, street-car brake-wheels, and old-fashioned spinning-wheels. *Held*, the adoption of the relative weight of the wheels used in road-scraping machines and the weight of the scraper and attachments so that the momentum of the wheels the weight of the scraper and attachments, so that the momentum of the wheels would be of essential value in the adjustment of the scraper, does not involve invention. Following Hollister v. Manufacturing Co., 118 U. S. 59, 5 Sup. Ct. Rep. 717; Duster Co. v. Levy, 43 Fed. Rep. 381.

The suit is for infringement of claims 4, 10, 11, and 13 of letters patent No. 331.920 issued to G. W. Taft for road-making machines. claims read as follows:

(4) The combination with a diagonal scraper supported in connection with a wheeled carriage and adapted for upward and downward adjustment independently at either of its ends of an operating wheel (or wheels) for effecting such adjustment, adapted to act as a momentum or fly wheel as set forth, whereby the peripheral weight of said wheel is utilized to assist in the adjustment of the blade substantially as hereinbefore explained.

(10) In a road machine, the combination of a scraper-blade adapted for upward and downward adjustment at its respective ends, an operating handwheel (or wheels) connected therewith for effecting such adjustment and a brake (or brakes) acting against said wheel to arrest movement thereof, and

retain the parts substantially as set forth.

(11) In a wheeled road-scraper, the combination of a scraper-blade adapted for upward and downward adjustment at its respective ends by a strap or chain (one or more) one end whereof connects with the lift-bar or lever, while the other end is arranged to wind onto the pinion or hub on the hand-wheel

or onto a sheave geared to the hand-wheel hub.

(13) In a road machine, the combination with an oblique scraper suspended beneath a carriage or body mounted on front and rear wheels, of means for imparting independent upward and downward adjustment at the respective ends of said scraper provided with hand-wheel and pinion devices for imparting movement thereto, and stops or brake devices acting in connection with said hand-wheels for retaining the parts at positions of adjustment substantially as described.

The defense assails the patent, and denies infringement. Joshua Pusey, for complainant.

West & Bond and M. B. Philipp, for respondent.

Butler, J., (after stating the facts as above.) The combinations described contain nothing new unless it is the use of "momentum handwheels." Ordinary hand-wheels in similar combinations, for analogous purposes, are old. This is abundantly shown by the record. I need

<sup>&</sup>lt;sup>1</sup>Reported by Mark Wilks Collet, Esq., of the Philadelphia bar.

only cite the patents of Day, No. 204,205, Dyson, No. 78,683, Smith, No. 297.861, Edwards & Durkee, No. 275.614, and Cook, No. 326.719. The claim of novelty rests alone on the introduction of hand-wheels "adjusted [in the patentee's language] to act as momentum or fly wheels." This appears very distinctly, not only from the state of the art, but also from the history of the patent—the rejection and amendment of claims. In the plaintiff's brief it is said the invention "consists in the substitution of momentum wheels for the scraper-raising levers of road machines, and in combining with them a brake which will hold the blade in its position." In court it was conceded that without the peculiar wheels the combination was old. The question whether the introduction of these wheels into the combination is new, alone, therefore need be considered, on this branch of the case. Webster defines "momentum" to be the "quantity of motion in a moving body; being always proportioned to the quantity of matter multiplied into its velocity," and a flywheel, as one "that equalizes its momentum, or accumulates power for a variable or intermitting resistance." All revolving wheels possess this quality, proportioned to their weight and velocity; and are capable of use as "momentum" wheels,—the term signifying those whose momentum is utilized in working machinery. It is only necessary that the resistance to their motion be properly adjusted to their force. known law of physics has long been employed in the mechanic arts. Mr. Taft says in his specifications: "The rims of the wheels must be sufficiently heavy to act as a balance against the weight of the blade-lifting device, so that the momentum of the wheel will assist in manipulating the machine." This is an accurate description of "momentum wheels," and their common use. As before stated, these wheels are old; and have long been applied to such purposes, in various devices. The plaintiff's expert, Mr. Brevoort, says:

"It has long been known that in cases where a continuous power was applied but the resistance to be overcome is unequal, a heavy fly or balance wheel will store some of the power expended during the easier part of the operation, and expend it during the more difficult part of the operation; that part of the power which is not needed at one stage is utilized at the other, where it is needed. For example, where a crank is used less power is needed to drive the crank, when it is descending, aided by gravity, than when it is ascending. In such cases a heavy fly-wheel equalizes the motion by storing some of the surplus power applied when the crank is descending and expending it to help the crank in its ascent."

He might have enumerated many similar instances of its use. The novelty claimed, as we have seen, does not consist of a new or peculiar wheel, but in the use of the old "momentum wheel" in a common device, for regulating road-scrapers. Mr. Taft substituted this wheel for the smaller one previously used in such devices.

While the language of the tenth and thirteenth claims does not limit them to such wheels, the limitation must be implied or the claims declared invalid on that account. Does the substitution of the heavier wheel for the lighter one embrace patentable novelty? Granting that the use of such wheels for this purpose is new, it seems to be analogous to the uses previously made of them. Whether as fly-wheels, rudder-reg-

ulating wheels (as seen in Tyler's patent) pump-operating wheels (as in Lyon's patent) street-car brake-wheels, crank-shaft wheels, (as in Boon's patent,) the larger spinning wheels of 50 years ago, and all others whose momentum was utilized, they were employed to aid in working the attached machinery. It does not seem important, as the plaintiff urges, whether the momentum is sufficient to continue the work, temporarily, after the propulsive force is withdrawn. The principle applied, and the uses made of it, are the same, where it is sufficient and where it is not. The insufficiency arises only from the disproportion of the wheel to the The momentum of the capstan-wheel (itself) winds the slackened cable, Day's rudder-wheel and Lyon's pump-wheel continue the work, as Mr. Bates testifies, after the hand is removed; and the larger spinning-wheel (now disused) drove the spindle after the hand was withdrawn.—(While this latter wheel is not mentioned in the record, it is a matter of common knowledge, and may be referred to by way of illustration.)—In all instances where the momentum of wheels has been utilized in mechanical contrivances, it has been employed to aid in their propulsion. So Mr. Taft employs it. The use is not, therefore, new. But it is clear that Mr. Tast was the first to apply such wheels to devices for regulating road-scrapers. The old wheels employed in such devices had momentum, and differed from his only in that they were lighter. however, there was no standard for the size and weight of the old wheels, it is probable that in many instances even this difference did not exist. Those called for in Lyon's patent seem to be heavier than his. plaintiff does not confine himself to wheels of any particular size or weight; but construes his patent to cover all wheels whose momentum can be used in operating the device. Those of the defendant are materially smaller and lighter than the plaintiff uses; yet they are complained of as infringing, because as Mr. Brevoort says, if "great force is applied so as to obtain a high rate of speed" their momentum can be utilized. This doubtless may be said as truly of many of the old wheels employed If sufficient speed is obtained they will store enough in such devices. momentum to continue motion for a brief period. Thus construed it can hardly be doubted the patent is anticipated. Granting, however, that he was first to see the importance of constructing wheels with such relation to the weight of the scraper and attachments, as would render their momentum of essential value in its adjustment, did this embrace invention? As was said in Duster Co. v. Levy, 43 Fed. Rep. 381, what constitutes invention has been so fully and repeatedly discussed that further elaboration would be waste of time. Two-thirds probably of all suits brought to enforce patents have involved it, and more time has been employed in its consideration than has been expended on any other question of patent law.

As is said by the supreme court in Hollister v. Manufacturing Co., 113 U. S. 59, 5 Sup. Ct. Rep. 717, a device which displays only the expected skill of the maker's calling, and involves only the exercise of ordinary faculties of reasoning upon materials supplied by special knowledge and facility of manipulation, resulting from habitual intelligent practice, is in no sense a creative work of inventive faculty, and such as the constitution and

patent laws aim to encourage and reward. It is something, as the court further says, at page 72, 113 U.S., and page 724, 5 Sup. Ct. Rep., "which springs from an intuitive faculty of the mind put forth in search of new results, or new methods, creating what had not before existed, or bringing to light what lay hidden from vision." In other words it is a new thing produced by the exercise of the creative or inventive faculty, and not by the employment simply of common reasoning applied to existing and known facts. Patents are constantly overturned for want of invention where its absence is not clearer than in this case. The later volumes of reports are full of such cases; eight being found in 132 U.S. It is sufficient to cite a few of them. Hollister v. Manufacturing Co., 113 U.S. 59, 5 Sup. Ct. Rep. 717; Thompson v. Boisselier, 114 U. S. 1, 5 Sup. Ct. Rep. 1042; Pennsylvania R. Co. v. Locomotive E. S. T. Co., 110 U. S. 490, 4 Sup. Ct. Rep. 220; Bussey v. Manufacturing Co., 110 U. S. 131, 4 Sup. Ct. Rep. 38; Weir v. Morden, 125 U. S. 98, 8 Sup. Ct. Rep. 869; Holland v. Shipley, 127 U. S. 396, 8 Sup. Ct. Rep. 1089; Aron v. Railway Co., 132 U. S. 84, 10 Sup. Ct. Rep. 24; Day v. Railway Co., 132 U. S. 98, 10 Sup. Ct. Rep. 11; Roemer v. Bernheim, 132 U. S. 103, 10 Sup. Ct. Rep. 12; Watson v. Railway Co., 132 U.S. 161, 10 Sup. Ct. Rep. 45.

In this view of the law I think it must be held that Mr. Taft's substitution of the heavier wheel, and consequent utilization of its greater momentum, did not embrace invention. Any competent mechanic whose attention had been called to the difficulty of operating the device with the smaller wheel (its tendency to reverse) would, I believe, have seen the importance of increasing its size and weight, and thus increasing its resisting force—would have seen that this alone was needed to overcome the tendency. Mr. Taft did no more. His discovery was the result of applying common reason to known facts. There does not seem to be

anything like invention about it.

It is not sufficient that a patentee has seen and applied what others have overlooked and thus made valuable improvements. Results obtainable by common reason are often thus overlooked, as in the case of the revenue stamp, involved in Hollister v. Manufacturing Co., above cited. There the improvement made was of great utility and the means of making it had been overlooked, though the importance of some such change had been felt for a long time. Yet the court held that it did not embrace invention. As is said in Pearce v. Mulford, 102 U. S. 118: "All improvement is not invention, and entitled to protection as such. Thus to entitle it, it must be the product of some exercise of the inventive faculties, and it must involve something more than what is obvious to persons skilled in the art to which it relates."

I have not overlooked the presumption to which patentees are entitled. In view however of the numerous instances in which patents are overturned, the presumption is not entitled to very great weight. In a majority of cases, where assailed they are declared invalid. For reasons stated the bill must be dismissed.

## WIRT v. HICKS et al.

(Circuit Court, S. D. New York. February 28, 1891.)

1. PATENTS FOR INVENTIONS—FOUNTAIN PEN—ANTICIPATION.

Letters patent Nos. 260,184, issued June 27, 1882, to Marvin C. Stone, and 311,554, issued February 3, 1885, to Paul E. Wirt, for fountain pens, in which the ink is led to the nibs by capillary attraction between the pen and a lip which extends into the ink reservoir, were not anticipated by British letters patent No. 2,858, issued October 2, 1869, to John Butcher, and letters patent No. 14,425, issued March 11, 1856, to A. F. and C. M. H. Warren, for pens having channels for guiding a flow of ink by gravity which might produce capillary attraction to aid the flow.

2. Same-Infringement.

Said letters patent are infringed by a pen in which the ink is drawn from the reservoir by capillary attraction, though in it the atmospheric pressure which sustains the ink and regulates its flow is assisted by a disk with holes in it instead of a nozzle, as in the Wirt pen, and though the extension of this disk into the reservoir is different from the lip in the Wirt pen, since these parts, though different, do the same things in substantially the same way. same things in substantially the same way.

8. Same—Application—Amendment by Attorney.

Where an application for patent is made by the inventor during his life by attorney, the fact that changes were made by the attorney in the specifications and claims without new oaths will not invalidate the patent, since a discretion as to the allowance of such amendments is vested in the commissioner.

In Equity. Bill for injunction. Walter S. Logan, for complainant. James A. Whitney, for defendants.

This suit is brought upon letters patent No. 260,134, granted June 27, 1882, to Marvin C. Stone, and No. 311,554, granted February 3, 1885, to the orator, for fountain pens, in which the ink is led to the nibs by capillary attraction between a lip and the pen, and in those of the latter the ink is brought within reach of the attraction by an extension of the lip into the reservoir. The defendants' pens are made under George H. Sackett, and letters patent No. 349,753, granted to him September 28, 1886. These inventions were under consideration on substantially the same evidence in Sackett v. Smith, 42 Fed. Rep. 846, brought against a dealer in the orator's pens; and the question of their order in time was passed upon. The conclusion upon this was that Stone's was first, the orator's next, and Sackett's last. A careful examination of the evidence now leads to the same result, and the reasons there given for the conclusion are fully concurred in. The novelty of the inventions of the orator's patents is further questioned upon several prior patents, and most closely upon British patent No. 2,858, of October 2, 1869, to John Butcher, and American patent No. 14,425, of March 11, 1856, to A. F. and C. M. H. Warren. Each of these describes channels for guiding a flow of ink by gravity, which might produce capillary attraction to aid the flow, and might not; neither describes drawing the ink to the nibs by that process. Stone's invention stands first as to that, and the orator's first for extending the lip into the reservoir. The validity of both of the orator's patents is further questioned, because after the applications were filed important changes