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SCIENTIFIC AMERICAN SUPPLEMENT

No. 800.

For the Week Ending May 2, 1891.

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RIGHTS OF EMPLOYERS TO INVENTIONS MADE BY THEIR EMPLOYES.

An interesting patent case was decided not long ago by the Supreme Court of the United States in which the rights of employers with respect to inventions made by their employes, at the expense and in the time of the employer, are set forth. This was a suit brought by Solomons, assignee of Clark, against the United States, to recover damages for the use of a self-canceling revenue stamp, invented and patented by Clark.

It appears that during the years 1867 and 1868, Spencer M. Clark was in the employ of the government as Chief of the Bureau of Engraving and Printing. While so employed he was called officially into consultation with the Secretary of the Treasury, commissioners, and the committee of the House of Representatives, and to him was assigned the duty of devising a stamp. In these consultations it was mutually understood that Mr. Clark was acting in his official capacity, as Chief of the Bureau of Engraving and Printing.

Mr. Clark laid before the Commissioner and committee a self-canceling revenue stamp, as being, in his opinion, a very desirable stamp for the prevention of fraud. This stamp was satisfactory to the Committee on Ways and Means and to the Commissioner of Internal Revenue.

No bargain, agreement, contract, or understanding was ever entered into or reached between the officers of the government and Mr. Clark concerning the right of the government to use the invention, or concerning the remuneration, if any, which should be paid for it. Neither did Mr. Clark give notice or intimate that he intended to protect the same by letters patent, or that he would expect to be paid a royalty if the government should manufacture and use stamps of his invention. Before the final adoption of the stamp by the Commissioner of Internal Revenue, he stated to him that the design was his own, but that he should make no charge to the government therefor, as he was employed on a salary by the government, and had used the machinery and other property of the government in the perfection of the stamp. No express license to use the invention was ever given by Mr. Clark to the government, nor any notice prohibiting its use, or intimating that he would demand a royalty.

Before Mr. Clark had filed an application for a patent, the Commissioner of Internal Revenue adopted the stamp as the one to be used in the collection of the tax on whisky and distilled spirits. It was adopted by the Commissioner on the recommendation of Mr. Clark, and engraved and made in the Bureau of Engraving and Printing and approved by the Committee of Ways and Means. The government then proceeded to manufacture at the Bureau of Engraving and Printing large quantities of these stamps. On Dec. 21, 1869, a patent was granted to Solomon, as assignee of Clark, for the invention.

In the Court of Claims judgment was entered in favor of the government. From such judgment an appeal was brought to the Supreme Court.

Mr. Justice Brewer delivered the opinion of the Court, from which we abstract the following:

The government has used the invention of Mr. Clark, and has profited by such use. It was an invention of value. The claimant and appellant is the owner of such patent, and has never consented to its use by the government. From these facts, standing alone, an obligation on the part of the government to pay naturally arises. The government has no more power to appropriate a man's property invested in a patent than it has to take his property invested in real estate; nor does the mere fact that an inventor is, at the time of his invention, in the employ of the government transfer to it any title to or interest therein. An employe, performing all the duties assigned to him in his department of service, may exercise his inventive faculties in any direction he chooses, with the assurance that whatever invention he may thus conceive and perfect is his individual property. There is no difference between the government and any other employer in this respect. But this general rule is subject to these limitations:

If one is employed to devise or perfect an instrument, or a means for accomplishing a prescribed result, he cannot, after successfully accomplishing the work for which he was employed, plead title thereto as against his employer. That which he has been employed and paid to accomplish becomes, when accomplished, the property of his employer. Whatever rights as an individual he may have had in and to his inventive powers, and that which they are able to accomplish, he has sold in advance to his employer.

So, also, when one is in the employ of another in a certain line of work, and devises an improved method or instrument for doing that work, and uses the property of his employer and the services of other employes to develop and put in practicable form his invention, and explicitly assents to the use by his employer of such invention, a jury, or a court, trying the facts, is warranted in finding that he has so far recognized the obligations of service flowing from his employment and the benefits resulting from his use of the property, and the assistance of the co-employes, of his employer, as to have given to such employer an irrevocable license to use such invention.

The case of *McClurg v. Kingsland* (1 How., 202) is in point. In that case was presented the question as to the right of the defendants to use an invention made and patented by one Harley. The facts as stated and the rulings of the court are these:

That Harley was employed by the defendants at their foundry in Pittsburg, receiving wages from them by the week. While so employed, he claimed to have invented the improvement patented, and, after several unsuccessful experiments, made a successful one in October, 1834. The experiments were made in the defendants' foundry, and wholly at their expense, while Harley was receiving his wages, which were increased on account of the useful result. Harley continued in their employment on wages until January or February, 1835, during all of which time he made rollers for them. He often spoke about procuring a patent, and prepared more than one set of papers for the purpose; made his application the 17th February, 1835, for a patent. It was granted on the 3d of March, and assigned to the plaintiffs on the 16th of March, pursuant to an agreement made in January. While Harley continued in the defendants' employment, he proposed that they should take out a patent, and purchase his right, which they declined. He made no demand on them for any compensation for using his improvement, nor gave them any notice not to use it, till, on some misunderstanding on another subject, he gave them such notice, about the time of his leaving their foundry, and after making the agreement with the plaintiffs, who owned a foundry in Pittsburg, for an assignment to them of his right. The defendants continuing to make rollers on Harley's plan, the present action was brought in October, 1835, without any previous notice by them. The court left it to the jury to decide what the facts of the case were, but, if they were as testified, charged that they would fully justify the presumption of license, a special privilege, or grant to the defendants to use the invention; and the facts amounted to "a consent and allowance of such use," and show such a consideration as would support an express license or grant, or call for the presumption of one to meet the justice of the case, by exempting them from liability, having equal effect with a license, and giving the defendants a right to the continued use of the invention.

On review in this court, the rulings of the trial court were sustained. That case is decisive of this. Clark was in the employ of the government when he made this invention. His experiments were wholly at the expense of the government. He was consulted as to the proper stamp to be used, and it was adopted on his recommendation. He notified the government that he would make no charge if it adopted his recommendation, and used his stamp; and for the express reason that he was in the government employ, and had used the government machinery in perfecting his stamp. He never pretended, personally, to make any charge against the government. Indeed, there is but one difference between that case and this. In that Harley's wages were increased on account of his invention; in this, Clark's were not; but such difference does not seem vital. We think, therefore, the rulings of the Court of Claims were correct, and its judgment is affirmed.

POSITION OF THE PLANETS IN MAY.

MERCURY

is evening star until the 9th, and then morning star. He is in inferior conjunction with the sun on the 9th, at 9 h. 41 m. P. M. The event is of unusual importance, for, as he passes between the earth and the sun, he makes a transit on the sun's disk, and will be visible upon it as a small black spot, a phenomenon that has not occurred for nearly ten years. The transit commences at 6 h. 54 m. P. M. and ends at 11 h. 50 m. P. M. in Eastern standard time, the transit continuing 4 h. 56 m. It will not be visible in New York, for it begins about sunset, but the farther west and north the observer is, the better will be the opportunity for witnessing it. For those who use central time, the transit commences at 5 h. 54 m. P. M., and is visible for an hour, or until sunset. For those who use Pacific time, the transit commences at 3 h. 54 m. P. M., and is visible for three hours, or until sunset. The whole western coast of North and South America furnishes a favorable locality for observing the transit. Every 15° of longitude makes an hour's difference in time. Traveling westward, it is so much earlier; traveling eastward, it is so much later.

As soon as it was discovered that Mercury was an inferior planet, revolving within the earth's orbit, it was known that he must pass between the sun and the earth at every inferior conjunction. If his orbit lay in the same plane as the earth's, there would be a transit at every revolution. His orbit is, however, inclined 7° to the earth's, and he must be at his nodes or crossing points, or else he will pass above or below the sun, and there will be no transit. The earth arrives at Mercury's nodes on May 7 and November 9, and transits must occur near those dates.

It is easy to calculate the recurrence of transits.