## Correspondence.

### Early History of Reissues of Patents.

*To the Editor of the Scientific American:*

I herewith submit copies of a correspondence on file in the Department of State, relating to the early history and practice of granting reissues of patents. The correspondence has never been published, and involves, so far as I can ascertain, the first issue ever raised between the Patent Office and an applicant for the reissue of a patent. The correspondence can not but be deemed interesting, if not instructive, as adding an item to the history of that unique feature of the American patent system—the reissue of patents. A brief explanation of the circumstances attending the correspondence will, perhaps, tend to its better understanding. The patent law of 1793 provided that upon application made to the Secretary of State for a patent for any new and useful invention or improvement thereof, he should cause a patent to be made out for the same for a term of fourteen years, but that before the patent should issue, the patentee should deliver, to be filed in the Department of State, a description of his invention. The decisions of the courts were that a patent was void if the description was defective or insufficient. In 1802, one William Thornton was appointed to have charge of the matter of issuing patents. He held that the object of the law, being to promote the progress of useful arts by rewarding inventors, was not accomplished when the public refused to correct a defective or insufficient description, innocently made, and that if the patent did not secure the invention to the patentee, by reason of such defect or insufficiency, it was within the spirit of the law to issue another and corrected patent therefor, for the unexpired part of the term of the original patent. This practice of Thornton's was first called in question in one phase in the subjoined correspondence; other phases affecting its correct administration subsequently formed the subjects of several opinions of the Attorney-General of the United States. The legality of the practice itself was not controverted until the notable case of Grant *v.* Raymond, U. S. S. C., January Term, 1832, and it was thereby confirmed. On July 3, following, the first statutory provision was made for reissues of patents.

LEVIN H. CAMPBELL, *Asst. Exam.*,
Washington, D. C., June, 1891. U. S. Pat. Office.

DEPARTMENT OF STATE.
PATENT OFFICE, Nov. 27, 1817.

*Sir:* I have received from George Sullivan, Esq., of Boston, an application for a renewal of your patent, under a declaration that the former one is deemed by the Hon. Judge Story insufficiently described in the specification, and therefore void. If I were to admit this, it might lead to dangerous consequences, for I must aver that the specification contains the principles in a manner sufficiently clear to enable any shoemaker to make a shoe or boot containing the principle, though it may perhaps deviate in some particulars from any specific mode; but if the principle be not new, then indeed the honorable judge is right, and you will be held to a *specific mode* of performing what is only an *improvement* or a variation in the execution. Your patent therefore will be issued as an *improvement* on the mode formerly described.

WILLIAM THORNTON.

To JOHN BEDFORD,
Philadelphia, Pa.

BOSTON, Dec. 30, 1817.

*Dear Sir:* By advices from Mr. Bedford, it appears that the patent he applies for is considered disallowable; because his specification shows an improvement only, and his patent should be only for this. The fact is, that at a recent trial for an infringement of Bedford's former patent for making shoes with metal nails, it was considered by Judge Story that the specification thereof described nothing which from the evidence it appeared was Bedford's invention. It was too general, insufficient and therefore void. Now, Bedford applies for a patent for the thing he *did invent*, which is now sufficiently described in the specification I had the honor to transmit, and the thing described therein is, in Judge Story's opinion, distinctly and legally different from the invention attempted to be described in the former specification. Then as his invention has never been protected by the former patent, that is entirely void, and his application for a patent on the specification now presented is therefore to be regarded as if none had ever before been granted. The Hon. Mr. Webster, who is of counsel with me in this case, and I have consulted upon your suggestion; and having the opinion of Judge Story with us on the subject, we feel no hesitancy in taking the risk of a patent in the form proposed. We think it will be sustained by the courts, and presume therefore that you will have no objection to issue it accordingly; the more especially, as your suggestion was advisatory and given probably without full knowledge of all the circumstances, of which, however, I take myself to blame of not more fully informing you.

GEORGE SULLIVAN.

To WM. THORNTON, Esq.

Mr. Thornton still declining to issue the patent as requested, an appeal was taken to the Secretary of State, who directed Mr. Thornton to explain to him why the reissue was denied.

DEPARTMENT OF STATE.
PATENT OFFICE, Jan. 6, 1818.

*Sir:* A patent was issued on the 16th day of July, 1806, to John Bedford, of Philadelphia, in the usual form, containing the specification of his invention in his own words. After enjoying the benefit of his patent for these twelve years past nearly, Judge Story, one of the supreme judges, acting in this case as a circuit judge, pronounces that the specification is not *sufficiently* specific, and that there ought to be a new patent issued. This was made known to me by George Sullivan, of Boston, counsel of Mr. Bedford. I sent to Mr. Bedford an answer, a copy of which is inclosed (letter, ante, Nov. 27, 1817), and since received the letter from Mr. Sullivan, who still urges a patent upon the general principle, which I must in duty decline to issue upon this plea: If a patent were really imperfectly issued by an official irregularity, or for the want of legal forms, dependent on the office, even then the demand of a patent would be a doubtful one, provided the patent had run for some years and the patentee had obtained the full benefit of the patent till arrested by a determination against him in law, from a want of validity in his patent. But it would be proper in this case to correct the patent, from the time of such legal arrest, to give validity for the remainder of the term, which I am even willing to do in this case without a new treasury fee, though the incorrectness was not the fault of the office, but of the patentee himself. But to give a new patent for the general principle when the patent has nearly expired, and the patentee till now has enjoyed the profit thereof, would be to rob the public of the benefit acquired by the fulfillment of the engagement virtually entered into by them and the patentee, which would open a door to unceasing deception and fraud, and would really be a *stultitiam premium.* If, therefore, Mr. Bedford wish a patent upon the general principle of his invention (which, however, I firmly believe is not his, having been in use in Ireland for many years, and the army of England has long been furnished with boots and shoes on this principle), I will grant it till the expiration of the first term of fourteen years, without any additional fee, as a correction of his erroneous specification, though this is not an official duty, nor could he of right demand it. Or if he wish a patent for any *specific* mode, as an *improvement* on the general principle, I will grant him a patent for fourteen years, according to the second section of the patent law, in the usual forms, and on his paying the fee, as a mere improvement, but not on the general principle, unless directed to do so by the Hon. the Secretary of State, who will please to decide on this, or submit it to the Hon. the Attorney-General; for it is a case that may hereafter be considered as a precedent.

WILLIAM THORNTON.

To the Hon. JOHN Q. ADAMS,
*Secretary of State.*

WASHINGTON, Feb. 3, 1818.

*Sir:* In relation to the patent claimed for John Bedford for the full term of fourteen years, I am of opinion, on the statement of the case as made by Dr. Thornton, that the claim is not warranted by our law.

WILLIAM WIRT,
*Attorney-General.*

To the Hon. J. Q. ADAMS,
*Secretary of State.*

WASHINGTON, Aug. 26, 1818.

*Sir:* I have reconsidered very deliberately the opinion which I had the honor to give you formerly on the construction of the patent law, and I see no cause to change it. Dr. Thornton's answer to Mr. Sullivan is, I think, a very proper one, and his exposition of the law a very sound one. If the former defective patent had been a nullity *ab initio*, I should concur with Mr. Sullivan; but so far from having been a nullity, I understand, from the facts, that it has completely protected the invention of the patentee for half the legal term; and, having derived this practical benefit from it, they ought not, I think, to be permitted by a legal fiction to regard it as a nullity. The power to issue a patent for a less term than fourteen years has, I also think, been placed on its true ground by Dr. Thornton—the restriction is on the *maximum* only, not on the *minimum*.

WILLIAM WIRT.

To Hon. J. Q. ADAMS,
*Secretary of State.*

### Hydraulic Mining in California.

*To the Editor of the Scientific American:*

In reading several back numbers of your journal, on my return from an absence of several weeks, I encountered an article in the paper of May 16, 1891, headed "Hydraulic Monitors," copied from the San Francisco *Chronicle*, which is so grossly wrong that I take it for granted you will gladly correct it, whether the *Chronicle* would do it or not. Hence I take the liberty of calling your attention to one gross misstatement. The statement I desire you to correct is the closing paragraph, where it is stated that there was "in use from the Feather, Yuba, Bear, and American Rivers, Butte Creek, and the two dry creeks, a total of 10,650,505 miner's inches of water each twenty-four hours. At an average of 3½ cubic yards of gravel to the inch, there was thus washed away daily 36,600,000 yards of material. This is a low estimate. As an actual fact much more was carried away. But the amount stated represents a mass of earth 500 yards long, 386 yards wide, and 200 yards high. With such a tremendous quantity washed away every twenty-four hours, it can be readily understood that no great length of time need elapse literally to remove mountains and cast them into the sea."

I have no mode of ascertaining who the Munchausen is who imposed such a statement upon the *Chronicle.* But it could only have emanated from some member of an association known as the Anti-Debris Association, as there has emanated before this statement, from that association, others worse if possible.

Now, if the reader of the paragraph referred to will divide each result by 365, he will come somewhat near the truth. And when the Munchausen states his figures "as a low estimate," and that "as an actual fact much more was carried away," he must have known that he either lied or did not know what he was writing about.

The actual fact was that from all the numerous streams on the west slope of the Sierra Nevada Mountains, for a distance of over 400 miles in length by about 120 miles in width, there was used, during the palmy days of hydraulic mining, not exceeding 10,000,000 miner's inches per year, which mined out not exceeding 30,000,000 cubic yards per year (not per day), turning out about $12,000,000 in gold. This gold yield is now at an end, as nearly all these great mines are closed by injunction caused by statements similar to the one herein referred to.

Very respectfully,
L. L. ROBINSON,
Prest. Miners' Association.

Los Medanos, California, July 7, 1891.

### Results from an Invention.

Dr. Lardner, writing of the steam engine, said: "To enumerate its present effects would be to count almost every comfort and every luxury of life. It has increased the sum of human happiness, not only by calling new pleasures into existence, but by so cheapening former enjoyments as to render them attainable by those who before could never have hoped to share them. The surface of the land and the face of the waters are traversed with equal facility by its power; and by thus stimulating and facilitating the intercourse of nation with nation, and the commerce of people with people, it has knit together remote countries by bonds of amity not likely to be broken. Streams of knowledge and information are kept flowing between distant centers of population, those more advanced diffusing civilization and improvement among those that are more backward. The press itself, to which mankind owes, in so large a degree, the rapidity of its improvement in modern times, has had its power and influence increased in a manifold ratio by its union with the steam engine. It is thus that literature is cheapened, and, by being cheapened, diffused; it is thus that reason has taken the place of force and the pen has superseded the sword; it is thus that war has almost ceased upon the earth, and that the differences which inevitably arise between people and people are for the most part adjusted by peaceful negotiation."

### A Lost River.

According to the Los Angeles *Herald*, the Southern Pacific Railroad Company has lost a river, and in consequence has a bridge whose occupation is gone. The Whitewater river has flowed from the Sierre Madre mountains across the sands of the region just this side of Seven Palms as long as any one can remember. The station of Whitewater was located where the river crosses the railway and was supplied with water from its current. During the last heavy rains the Whitewater rose in its might and devastated the whole country round about, washing out the bridge and the roadbed and playing the mischief generally. Soon the rains and the river stopped simultaneously, and the river has not been found since. It appeared to become ashamed of itself for doing so much arm, and has apparently slunk away in disgust and sorrow. It is entirely gone. At no point does it cross the railroad, as it would have to do were it still in existence in some new course. The railroad company, in order to secure water for its station at Whitewater, has been obliged to build a pipe line away up to the mountains, at considerable expense. All last summer, during the hottest, driest weather, the river ran placidly along—in fact, it has never failed until after its "jag" of this winter. Now it forms one of the mysteries of that mysterious region, the Colorado river desert, and perhaps is flowing by the Pegleg mine, and possibly rippling beside the treasure-laden Spanish galleon which lies somewhere in that region buried in sand.

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