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Vol. III., No. 13 .... [NEW SERIES.] ..... Sixteenth Year.

NEW YORK, SATURDAY, SEPTEMBER 22, 1860.

REMARKS ON HOWE'S SEWING MACHINE EXTENSION CASE.



N our last number, we au nounced in a brief paragraph, that the Sewing Machine Pa tent of Elias Howe, Jr., had been extended by the Commissioner of Patents for seven years. The fact well-known to the public, that the pa-

tentee had realized a large fortune from his invention. together with the severe manner in which the application was discussed by a portion of the newspaper press of this and other cities, led to a very general conviction that the patent would not be extended.

There are some who do not hesitate to denounce the action of the Commissioner of Patents in this matter, and accuse him of being influenced by improper motives. This we cannot but regard as unjust, for upon a fair and candid review of the testimony brought to bear in favor of the extension, and which was nowhere impeached, the fact is fully established that the sewing machine is one of the most valuable and important inventions ever made, and that no invention of greater value has even been secured by Letters Patent in this country, and without which security every invention would be entirely at the mercy of the public.

In acting upon such cases, the Commissioner assumes a grave and important duty, one which he is bound to discharge in an unright and conscientious manner, and upon such sworn evidence as is presented to him on the trial. We incline to the opinion that in this case the general verdict of the public will be, that as a judicial decision, it is based on sound and correct principles. Let every unprejudiced reader make this case his own, and take into consideration the leading facts and circumstances connected with it. In the first place, we do not believe there is a single inventor past or present, who under the same circumstances, would not have applied for an extension of his patent, and strenuously advocated the justice of his claim. It must be borne in mind also, that notwithstanding all the clamor which is made about it, Howe produced an original invention, one of great importance, even though it were but the foundation stone of many others of more or less value. He did not simply take what others had done, and by adding a little here, taking off a little there, produce an improvement or some new and pa tentable combination. He struck out into a new and comparatively unknown field of research, and he met success ; not only this, but he began life a poor inventor, and had to contend sharply with poverty and prejudice, and was at times almost reduced to beggary. It was only after the first seven years of his patent had expired, that he began to realize any profit from his invention. It is true that Howe has realized within the past six years, a large sum of money for his invention, while it is also true that he has freely expended it-not in riotous living, but in such ways as are always acceptable to a community. We can testify from our professional experience, that there are many cases where the poor but worthy brother inventor, has received from Howe substantial and much-needed aid; while if he had gone to those who had maglined Howe and his motives, his case would have been met with the cold shoulder and the frown. We admit that such considerations as these, will not weigh as arguments to support a bad cause; but we do say that the inventor who uses the means ment. Is it not well worth the attention of our own?

acquired from his discoveries to advance the welfare of his race, and does not stingily shut up his bowels of compassion against those who seek and need his friendly aid, is justly entitled to more of the substantials of life than are those who spurn the inventor as a poor deluded heing.

The question is not simply how much has an inventor made out of his patent-but, is his invention valuable to the public? Has he used due dilligence to introduce it? Has he been sufficiently remunerated for the invention, considering its value? and has the public respected the rights of the patentee?

In a case, in England, where the parties holding the patent had made a very large sum of money, but where it was shown that infringers had invaded the rights of the patentees, Lord Brougham, in giving the judgment of the Privy Conncil. expressly stated, in granting the extension, that it was not because the patentees had not made large profits, but because others had unfairly attempted to obtain possession of the invention before the patent had expired, and that they ought to be taught to respect the rights of others. Howe's case, it seems to us, is one parallel to this, and we think the judgment of Lord Brougham might have been properly applied to it.

The public has its rights, but it has not a right to deprive the inventor of the peaceful possession and proper use of his invention, as contemplated by law, and it is high time that this principle was more generally recognized and respected.

Mr. Howe will now enjoy his invention for a term of seven years, and then it will become the property of the public forever, as it will never again be extended.

We confess to a surprise at the opposition which arraved itself at the Patent Office against this extension. It was weak and impotent, and just such opposition as could have but little influence. It consisted principally of those who were known infringers of Howe's patent; and the singlular spectacle was also presented of a patent agent appearing, without client or friend, to fight on his own hook.

There are some interesting statements in connection with this case published on another page. The fact is established beyond controversy that the first practical sewing machine was the invention of one of our own countrymen.

# COMMERCIAL STEAMERS AS SHIPS OF WAR.

The most important step in diplomacy ever taken by the United States government was the refusal to give up the right to employ merchant ships as volunteers in case of war. The ablest diplomatists of the seven principal European nations had met and agreed to abolish privateering, and this country was invited to become a party to this great change in the law of nations. Secretary Marcy's dispatch, in reply to this invitation, has always seemed to us to afford more just grounds of pride to its author than any other document that ever issued from the American Cabinet. His reasons for declining the invitation were so conclusive that they were virtually assented to by both Louis Napoleon and Lord Palmers ton, the leading minds who proposed the change. One reason that Mr. Marcy advanced, though not prominent ly, has always seemed to us the conclusive ground for re fusing to assent to this change; that is, the absolute certainty that none of the governments would fulfill their engagements when the time of trial should come. It is so easy to change a private vessel into a government vessel. For instance, instead of issuing letters of marque, a government might buy all the vessels that offened, and pay for them out of the captures they could make. How much ownership in a vessel on the part of govern ment does it take to make her a naval vessel? As Mr. Marcy said, it is impossible to draw the line.

The soundness of this position is absolutely established by a discussion that is now going on in England, in regard to the changing of commercial steamers into ships of war. A committee of the House of Commons has been appointed to investigate the matter, and, in the regular English way, they have taken a great deal of testimony from masters of steamships, naval officers, and others familiar with the subject. The universal opinion is that the scheme is practicable, and there can be little if any doubt, that measures will be taken to facilitate thechange in case of war by the British govern-

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#### THE RELATION OF SCIENCE TO THE INDUSTRIAL ARTS.

In another past of this paper will be found an illustrated description of the application of the gyrascope to the regulation of the speed of marine engines. It is a practical and valuable invention, which accomplishes by this novel means a result that has eluded the efforts of all inventors using the properties of matter heretofore employed in the arts. When the gyrascope was introduced, a few years since, to the attention of the community, it was regarded as a scientific toy, and no one ever dreamed that it could ever be made of any use in the practical affairs of life. This fact illustrates the relation between pure science and industrial art which has indeed been sbundantly proved, but which is not, by any means, generally recognized. "What is the use?." is the very common question when some great but apparently barren discovery is made in abstract science.

Hidden in his obscure laboratory, among his retorts and crucibles, the chemist is intently engaged in ascertaining the relative affinity of oxygen for sodium and for aluminum. The practical man passes by with a sneer at this utter waste of intellectual labor. The chemist plods on a few years, and lo! the world is endowed with a new metal, of rare, peculiar and invaluable properties.

Learned geologists meet and dispute, almost with fierceness, the relative ages of certain rocks which were deposited in the bottoms of unknown seas in the immeasurable ages of the past. "How utterly useless ! " says the legislator, engaged in the discussion of railway hills and other measures of immediate necessity. But this science also vindicates its claim to utility ; and all bodies of legislators find that there is no more profitable employment of the public money than in having geoogical surveys made of their respective States.

The most surprising instance, however, of pure science proving useful to man, is furnished by astronomy. The heavenly bodies are so immensely distant, so absolutely unapproachable, that it must have been impossible to conceive that a knowledge of them could ever be of any practical value to the world. How certain must have been the money making merchant of early times that the star-gazer was a useless cumberer of the earth ! But this knowledge of the heavenly bodies is the thing which guides the merchant's ships in safety over the seas, and brings his cargoes to their profitable market.

It is irrational to say that any item of knowledge, however abstract or remote from the common affairs of life, may not be turned to useful account in some of the complicated operations of modern art. Among all the evidences of design and benevolence which are afforded by the works of creation, there is none more impressive than the wonderful variety which characterizes the human race. Some men like to pass their lives in roaming over the ocean, and others in tilling the earth ; to many is afforded a peculiar gratification in the accomplishment of difficult undertakings or the triumphs of mechanical skill, while a select few find the purest and highest enjoyment in the pursuit of abstract knowledge, without any reference whatever to its application to the affairs of life. In organized society these several tastes find each its sphere of action, and thus Science and the Industrial Arts labor harmoniously together, both alike conducive to the improvement and well being of the human race

## THE WAY THE SOLAR SYSTEM WAS FORMED.

Our readers are aware that the modern discoveries in astronomy have lead to the development of a theory, by Laplace and others, in regard to the mode in which our earth and the other bodies of the solar system were originally formed from chaotic matter into their present shapes, and caused to move with such wonderful harmony in their orbits. The theory is, that the matter of which the solar system is composed existed, at the earliest period of which we have any evidence of its condition, in the state of a fiery cloud or vapor, of a lense shape, and filling an immense extent in space. Laplace supposes that as all this hot mass radiated its heat into surrounding space, it was drawn together by the mutual attraction of its particles, and he says, "this drawing together would result in a rotation of the whole mass around its center of gravity." He supposes that this rotation would, as the condensation proceeded.