



NEW YORK, MAY 13, 1848.

A Caveat.

This is the name of a document filed in the confidential archives of the Patent Office. It is for the purpose of protecting the discovery of a new invention and allowing the inventor time to make experiments for the purpose of perfecting the same. The inventor must pay twenty dollars into the Treasury of the United States, and set forth his design, its purposes, principle and distinguishing characteristics. If application is made within one year, after the filing of said caveat, by another person for a patent for the same discovery, the Commissioner of Patents informs the person who filed the caveat of this fact, and if he wishes to avail himself of the benefit of his caveat he must make his application for a patent within three months after he gets the notice from the Commissioner. If he does not do this, his caveat fails to be of any benefit.

If a caveat has been filed by one person and application made for a patent for an invention of the same nature by another inventor, that is, if their claims interfere with each other, "like proceedings may be had in all respects as in the act of Congress made and provided for interfering applications."

This is the law of 1836, section 12, and it is perfectly plain that a caveat filed must distinctly claim something. If it claims nothing it must be void. Some think that a vague description in a caveat is enough, but if this was so, there would be a most extended field for patent frauds. Unless a caveat is perfectly plain and clear and agrees in its main features with the specification for the Patent of the caveat filer, it must be void. If it were not so, all that a person of the most obtuse, but low cunning intellect would have to do, would be to file a caveat for some invention of which he heard some vague reports, and wait patiently until some other person completed the invention, when he might go and see it—construct the same exactly in all its parts and then take out a patent himself and prevent the right inventor from getting one.

The decision of a Board of Examiners in the Patent Office in favor of any one of the interfering applicants for a patent, does not preclude the contesting of the validity of a patent in any judicial Court. A caveat which only describes principles and combinations known before, must be useless, and no doubt many are lodged that would be utterly worthless if contested. No notice is sent to those who make application for a caveat, whether the description in the caveat is new or old.—The decision of the Commissioner is wisely reserved by law in this case to the application for the patent. Those therefore who would avail themselves of the benefit of the caveat should not linger in the perfecting of their invention—as it is always best to prevent by prompt measures, the troubles of contesting rights. Some may suppose that there is but little benefit in a caveat, but they are much mistaken. It frequently happens with inventors that they are troubled more with some minor point to get their invention perfect than with the general principle of the invention. In such a case, a caveat plain and clear should be immediately filed to allow time for experiments to perfect the whole invention. There is but little extra expense for a caveat and in such a case as the one last mentioned, it is not only prudent to file a caveat, but it is more than prudent—it is an act of necessity as it lays at once the foundation of the Patent Claim.

Ventilation—Health.

We cannot too frequently advert to this subject, as we daily and hourly perceive violations of all the physical laws in the prosecution of business, or in the search after wealth. There is scarcely any use, it may be said, of bringing any more facts to bear upon this subject as every person is well aware that well

ventilated apartments conduce to health and improper ventilation is the cause of many diseases. This is indeed true, but in a city like this where so much indoor work is carried on, and where small and ill ventilated apartments seem to be the order of the day, we believe that it is our duty to point out those evils that are injurious to the well being of man, especially those that are connected with mechanical pursuits. A hot atmosphere is not so injurious to the human system as many suppose. It is only the want of fresh supplies of air that is hurtful to health. The oxygen that is in the atmosphere is the grand renovator of the system. It supplies the lungs with that proper support necessary for the operation of the human machine. Take away from the atmosphere its vital principle, oxygen, and we then inhale a deadly poison. Every respiration made by a man working in a confined apartment has a tendency to poison the air which surrounds him, for by the act of breathing the oxygen is mysteriously separated from the nitrogen of the atmosphere, and carbonic acid gas and nitrogen expelled from the lungs. We may well consider then, that an operative working constantly in a small or large room, if it is ill ventilated, is daily consuming himself. This is not a visionary view—we have seen with our own eyes too many sad evidences of ill ventilated apartments. It is very easy for some writers to say, "if those who are required by their occupation to work indoors, would be persuaded of the absolute necessity for a free circulation of good air during their labors, we should not find so many sedentary operatives complaining of loss of appetite, distressed sensations, and a nervous and irritable state of the feelings." But those who work indoors have not always the choice of the proper ventilation necessary to their health. We know a Piano Factory in this city, (and perhaps they are all alike,) where some of the apartments are kept so warm and are so ill ventilated, that the health of no workman is safe who labors therein. The apartments are kept warm and dry for fear of moisture that might injure parts of the instruments to be manufactured. It may be somewhat startling to those who thread the notes of the inspiring piano to know that some operatives who were engaged in its manufacture, wrote within the sounding casket, in reference to their own fate "memento mori" There are hundreds and thousands of operatives in this city, and in every city, who labor in ill ventilated apartments, over which they have no control—necessity compelling them to their daily tasks. But those who can have well ventilated apartments and do not use the means to ventilate them, are certainly culpable in the sight of their Creator.

Claim of Woodworth's Patent.

As we have had a number of communications relative to this patent, we publish the following as a general answer to the inquiries made.

CLAIM.—The employment of rotating planes substantially such as herein described, in combination with rollers or any analogous device to prevent the boards from being drawn up by the planes when cutting upwards, or from the reduced or planed to the unplaned surface as described. And also the combination of the rotating planes with the cutter wheels for tonguing and grooving, for the purpose of toaguing and grooving boards, &c. at one operation as described. And also the combination of the tonguing and grooving cutter wheels for tonguing and grooving boards at one operation as described. And finally the combination of either the tonguing or the grooving cutter wheel for tonguing or grooving boards, &c. with the pressure rollers as described.

Old Independence Hall.

Gas has just been introduced into this sacred old Hall, Philadelphia. The old chandelier that shed its candle light upon the sages of the revolution, has been slightly altered for the burning of the gas: but not in its material and essential parts. The room itself is at present worth a visit, being hung in mourning as a token of respect to the memory of John Quincy Adams.

Economy of Power in Cotton Factories.
(Concluded from our last.)

However essential to economy of power may be a substantial building, a skilful plan and arrangement of shafting, their advantages may be more than counterbalanced by an injudicious selection of machinery.

It may be justly said of the different kinds of cotton machinery in use, "their name is legion," and a person incapable of judging for himself respecting their merits, is apt to become bewildered by the representations of machine makers and their agents whose "vocation" is to extol the works of their own hands. Within the past four years several committees of gentlemen from Southern cities have traversed the Eastern and Middle States with the view of obtaining information as to the best machinery for manufacturing by steam power at the South. Being unable to judge for themselves by inspecting the machinery in operation, they had to ask the opinions of Mr. A, B, C and D,—all "great guns" in the cotton machinery line. Each gun would give a different report, and the only criterion for determining their claims to attention was the length of their fire.

None but a practical manufacturer, unbiassed by any machine shop alliances, is competent to give advice in the matter. Having had some little experience of nearly all the cotton machinery in common use in this country, and being entirely unconnected with any machine maker, we feel conscious of no motive for penning our preferences but the merits of the machine itself.

Beginning with the preparation department we shall proceed to notice the machinery that ought to be selected for a mill where economy of power is of great importance.

THE WILLOW.

This machine is principally intended to open the tufts of cotton preparatory to its being cleaned by the picker. Although the willow should separate much of the sand and other foreign matter from the cotton, this is an incidental, not a primary object of the machine. "Mason's Whipper," accomplishes this end better than any now in use. It costs but 75 dollars—occupies about as much room on the floor as a common sized tea box—can be driven with a slack two inch belt—is easily kept clean (an important recommendation,) and never gets out of order if its bearings (four in number) are properly oiled. One of these can do work for 12,000 to 15,000 spindles on No. 28 yarn.

For fine work the cotton should undergo two operations of the machine. As the power consumed by different picking machines only varies to any extent according to the quantity of work they produce, we shall proceed to notice,

THE CARDS.

There are no cards in this country that will produce an equal quantity of work and consume so little power as the "Double doffer Cards," made by the Matteawan Co. Ten of them working as single cards will make superior work to 16 common cards working as breakers and finishers.

Double carding for all Nos. below 40's is at variance with economical principles either of power or labor. Nearly all the mills at Lowell, Massachusetts, use breakers and finishers or double carding—a piece of extravagance which is only compensated by their large capital, and the slavish length of their working hours. Single carding was introduced in all the mills of the York Manufacturing Co. at Saco, Maine, some years ago, and was attended with an immense saving of power and labor, as well as an improvement in the quality of work.

THE DRAWING FRAMES.

The Drawing Frames are used merely to straighten the fibres of the cotton, and compensate, by doubling several slivers together, for the inequalities of spreading at the picker. When this object is attained any further action of the drawing frame upon the staple is a positive injury. I have seen good 25's yarn made with only 64 doublings, and twice drawing. Many mills for no finer Nos. double from 3000 to 4000 times and draw 4 times.

The best Drawing Frames are made by the "Water Power Company," of Saco, Maine.

THE SPINNING MACHINES.

The Spinning Machines are perhaps the most in point of economy in a cotton mill.—There are three kinds of self-operating Mules viz. "Sharp & Robeto's," "Mason's," and "Smith's" The principal throstle frames are the "live spindle," "the dead spindle," the "ring and traveller," Danforth frame and Gore's patent or tube frame. Manufacturers differ in opinion regarding the merits of Mules and Throstle for spinning yarn. Some prefer Mules for both warp and filling, others prefer Throstles. Experience proves however that throstle yarn is better for warp and mule yarn for filling.

The best throstle frames are "the ring and traveller," and Smith's is the best mule.

The merits of the "ring and traveller" frame have been long acknowledged, but some practical difficulties consigned it to a temporary oblivion, which recent improvements have dispelled and rendered it capable of producing an elegant thread, and a larger quantity with the same consumption of power than any frame yet in operation. The three kinds of mules mentioned were put in operation in the same room at Great Falls, N. H., for the purpose of testing their respective merits. An accurate account of their products and the quantity of waste made was kept and the result demonstrated the superiority of Smith's Mule over the others.

W. MONTGOMERY.

The American Institute.

This Institute has been charged with gross extravagance and mismanagement. Whether this be so or not we cannot tell, although we must say that there have been more than one of our correspondents who justly charged the Institute with partiality in the awarding of Medals. Many suppose that a gold medal is a mark of the most superior invention as awarded for that purpose by the Institute, but those who paid for the gold received the medal, and certainly this is a sublime consolation to receivers of the medals. They cannot say it was charity—it was their own inherent right. This is at least some consolation to those who may have looked coldly on a silver ducat, or a diploma.

Maker of the Infernal Machine.

It will be recollected that an attempt was made a few years ago, to assassinate Louis Phillipe, by a man named Fieschi, with an instrument called an "infernal machine," which consisted of a number of gun barrels, so adjusted that they could be all discharged simultaneously. In a cellar not far from our office; there is a man who earns a living as a tinsmith. This gentleman, is the same who constructed the aforesaid infernal machine for Fieschi, and has lived here for many years. He is delighted with the course of Events in Europe, and says he is a much more independent and respectable man than the ex-monarch of France. While he is contented and satisfied by making a decent living, by making lamps and street lanterns, the other had to cut and run in disguise.

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