New Inventions.

Important Patent Case.—Page's Saw Mill.

About a year ago, considerable excitement was caused among the saw mill owners and manufacturers of saw mill machinery in Southern and Western New York, by the prosecution of no less than a hundred of them for an infringement on the patent of George Page, of Baltimore, Md., for the combination of the vibration of the circular saw arbor, with the use of guides near the edge of the saw. A convention of the parties was held at Elmira, N. Y., shortly after the notice of the suits had been served upon them, and it was resolved to contest the claim set up by Mr. Page. A large number of those prosecuted, however, finally compromised the matter, but thirty-five stood out, and preferred to abide by the decision of the Court. The cause were set down for the last term of the U. S. District Court, Northern Circuit, New York, Judge Hall presiding, in Canandaigua.

The suit against Elijah B. Georgia, was brought up on the 16th ult., and occupied the attention of the Court for three days. On the 19th, the Jury brought in a verdict in favor of the defendant; the testimony of several witnesses went to prove that the invention claimed was in use in New York before Mr. Page invented it.

Mr. Page, we understand, will carry the case up to the United States Supreme Court. He claimed $100 for every saw used on the "combination" principle. Witnesses were brought from all parts of the Union to give testimony in the case, which, as a matter of course, elicited much interest.

The foregoing is the substance of an article in the *Elmira* (N. Y.) *Times*.

Atmospheric Propeller for Steamers.

The Philadelphia *Ledger* describes an experiment made in that city on a model boat two feet long, propelled by the action of wings or fans in the air, an improvement of Mr. Thos. Silver, the inventor of the marine governor. The boat is to be furnished with a steam engine, to which is attached four fans, with the handles placed in a hub, upon a spindle, the whole forming a mechanical power, similar to the screws now used as propellers. It is intended to use the air, instead of water, as the fulcrum for the fans to work upon, making up for the difference in density between the air and water, by a greater rapidity of motion.

"The inventor claims that for canal purposes this mode of propulsion would be far superior to the ordinary water-wheel in consequence of the non-agitation of the water, which would prevent the washing of the banks, a serious injury, which always results in the use of steam power."

To employ the air as a medium of steamboat propulsion, in place of the submerged propeller, the propeller will require to be of great proportions, and driven with an immense velocity. A surface velocity of such a propeller, amounting to 1760 feet per minute, will only exert a pressure of about 2 lbs. on the square foot.

Meeting of the American Association for the Advancement of Science.

The next meeting of this Association will be held on the 20th inst., in the city of Albany, the capitol of New York. It is expected to be the largest and most attractive meeting of the Association ever held. The State Geological Hall and the Dudley Observatory are to be inaugurated on the occasion. The latter is named in honor of its great patroness, Mrs. Dudley—a wealthy widow lady.

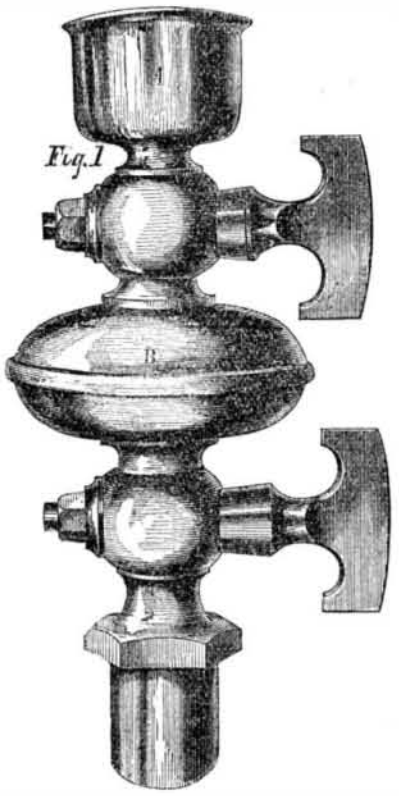
In order to give *eclat* to the meeting, some of the citizens of Albany selected Mr. John Gavit to proceed to Europe some time since, with invitations to a number of eminent *savans*, some of whom are expected to be present. Their expenses are to be defrayed by those who invited them. Neither the Observatory nor the Geological Hall, are at present in a fit state for inauguration and if they are not properly fitted up, (and this, we believe cannot be done) when the Association meets, it would redound more to the honor of the people of Albany to postpone such ceremonies, and allow the attention of the members of the Association, to be wholly directed to the reading of papers and the discussion of scientific questions—which are the real objects for which the Association holds its annual meetings.

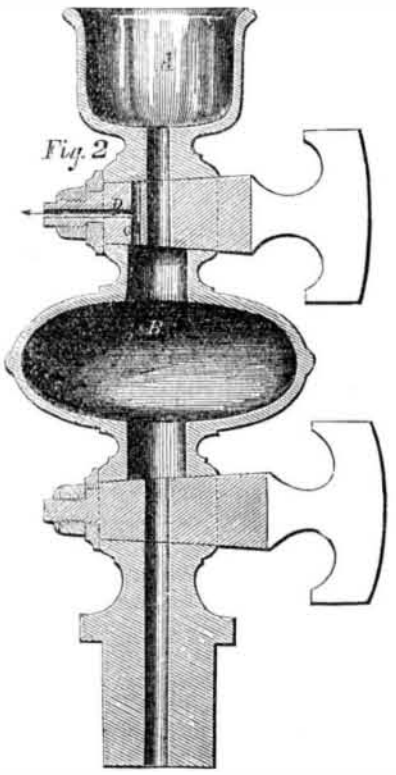
Our readers, as usual, may expect brief and clear reports of useful papers read at the meeting.

Mechanics Wanted.

The Paducah (Ky.) *Democrat* says: "There are now needed in Paducah 150 to 300 mechanics, such as house and ship carpenters and joiners, as there are now lying here about 40 steamboats, the majority of which are to be repaired. There are also needed here coopers, painters, &c., all of whom can obtain the highest wages in the United States."

IMPROVEMENT IN GLOBE OIL COCKS.





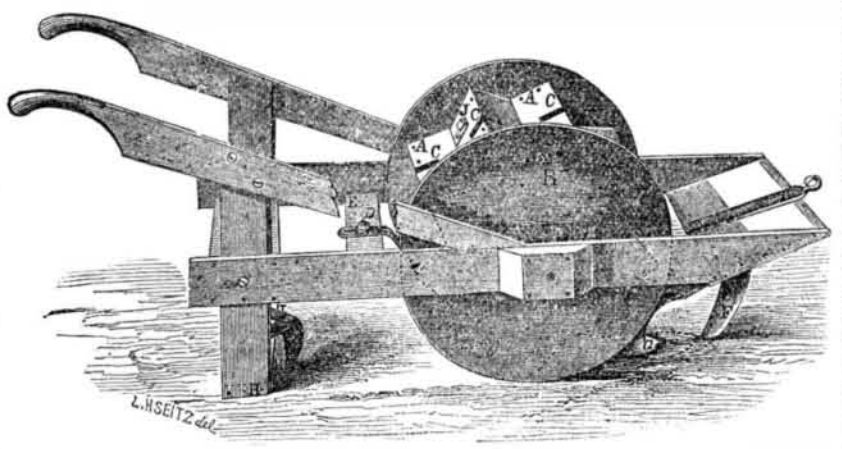
Improved Oil Cock.

The ordinary globe oil cocks are furnished with a third faucet, attached to the central oil chamber, for the purpose of permitting the escape of the air when the oil enters said chamber. In the present improvement only two faucets are employed, the instrument being thus considerably simplified and cheapened.

Figure 1 is an external view of the improvement, and fig. 2 a side sectional elevation. The oil is introduced at the cup, A, and flows down into the globe chamber, B. Of course there must be vent for the air in B, else it could never fill. For this purpose two holes are drilled at right angles opening into each other, as at C D, the arrangement being such, that when the upper faucet is open, so as to permit the ingress of oil from A, the openings, C D, will afford the proper air vent for chamber B, as indicated by the arrows. When the upper faucet is shut the vent openings will also be closed. The lower faucet may be then opened and the oil will fall into the steam cylinder.

The evident convenience in use, simplicity and economy in the manufacture of this invention, will commend it to the attention of engineers, and others interested in such matters. We are informed that it gives much satisfaction to all who have it in use. The inventor is Mr. Richard T. Crane, Chicago, Ill., of whom further information can be had. Patent applied for.

NEW COTTON SEED PLANTER.



Improved Cotton Seed Planter.

Our engraving represents an improvement in machines for planting cotton and other seeds, invented by Mr. J. A. Stewart, of Mitchellsville, Tenn., and patented July 1, 1856. It consists of a hollow drum, A, made in zig-zag form and placed between a pair of wheels, B B. The drum revolves with the wheels. The seed to be planted is contained within the drum. The apex of each corrugation is slotted, as at C, and the grain falls through these slots, into the furrow. D is a clearing rod, attached to the cross bar, E. Rod D projects forward into the slots, C, and keeps them clear from all obstructions that might prevent the proper discharge of the seed.

The furrow is opened by means of an opening knife, F, and a shovel share, G, attached to the front end of the machine. A covering board, H, extends across between the legs of the machine; I I are adjustable harrow teeth, attached to the covering board, H. These teeth serve a useful purpose in assisting to stir the ground and cover the seed. The seed is introduced at J, one of the flat boards of the corrugated drum being hinged for that purpose.

This machine is very simple in construction. There is an entire absence of moving valves and levers. We have described it as applicable to planting cotton seeds, but it may be used with equal success as a corn planter, the only change necessary being the attachment of slides, so as to diminish the size of slots C.

We are informed that the invention has been thoroughly tried, and found to operate with entire success, both on even and rough ground. It distributes cotton seed with certainty and regularity, the quantity sown being varied at will, by altering the position of the clearing rod, D, setting it further in or out. It works equally well in windy or calm weather, on dry or moist soil. It deposits and covers the seed at a uniform depth, thus insuring an even growth and ease of cultivation. We are informed that one hand and a mule will do the work of five hands and three mules, laboring in the ordinary way, as the machine is, in a measure, a substitute for the harrow. Cost of construction quite small. Address the patentee, as above, for further information.

Artificial Ears.

MESSRS. EDITORS—The result of some experiments lately performed, induces me to lay before your readers, in a brief manner, a device, convenient and effectual, for the amelioration of partial deafness. The ordinary ear trumpet involves the necessity of constant handling, and is often an incumbrance. From these facts, many persons, who would be benefitted by its use, discard it altogether. The plan I propose, is to make a short delicate ear trumpet of some light suitable material, say gutta percha, india rubber, or simply waxed linen, cambric, or other goods, with a stem of such shape and length as may fit easily in the meatus of the ear, and allow the bell-shaped portion to turn forward. One of these in each ear, with the expanded part of it two inches in diameter, well adjusted in the ear, will very considerably (probably fifty per cent.) increase the power of hearing, if the speaker is before the individual addressed. At the same time it may be entirely concealed among the artificial flowers and ribbons worn in a lady's head-dress, and made to resemble a flower so much as to be ornamental. Each artificial ear need not weigh one dram, nor cost fifty cents, and may be fixed upon the head-dress, so as to be completely adjusted and kept in place by the latter. The particular shape and size will vary in different cases, and will readily be found out upon trial. A gentleman afflicted with partial deafness may have his artificial ears constructed from four to six inches in diameter, if necessary, and of such light materials that they can be fixed to his hat brim, and worn without any inconvenience whatever. These artificial ears, thus made and worn, will enable many persons to enjoy a conversation with a friend, listen to the sermon on the Sabbath, and be aware of every thing of an audible character transpiring around them, nearly or quite as well as if their hearing was unimpaired.

W. H. BYFORD.

[The above is a good idea, and has been adopted pretty extensively within a year or two past by those afflicted with slight deafness. Mr. E. G. Hyde, No. 15 Maiden Lane this city, took a patent on an implement of this kind in May, 1855.

Dr. Byford has our thanks for calling our attention to a subject which interests so many. —[ED.

Hydro-Steam Engine.

This is the name of a new engine by John Ryle, of Paterson, N. J., which is somewhat praised in the *Weekly Guardian* of that manufacturing and enterprising city. It consists of two steam cylinders yoked together, and working two pistons, which receive their steam on the one side only, while on the other side they are in contact with water, which they force like pumps through a small turbine wheel. This wheel is driven with a high velocity, in order to obtain great speed on it without the use of gearing to drive intermediate machinery.—This is the improvement claimed.

If the water in contact with the steam cylinders is of a lower temperature than the steam, there will certainly be a great loss of heat by absorption. The use of two cylinders —single-acting in place of one double-acting —and a water wheel driven as described, to supersede a simple belt and pulley, does not appear to be a happy method of improving the steam engine.