New Inventions.

Improved Skate.

Messrs. Alex. Barclay and C. W. Bontgen, of Newark, N. J. have made a very beautiful improvement in the manufacture of Skates, which renders them far more easy of adjustment to the foot than by the old plan. The improvement consists in providing a skeleton malleable iron sole to which the runner is rivetted or attached by screws, and having two rings cast on the sole at both sides at the instep to supersede the old side buckles. A steel spring is also attached to the sole under the instep making the skate elastic with the play of the muscles of the foot, enabling the wearer to skate with great ease. There is no winter exercise more beautiful and healthful than skating. This is an art for which old Ben West used to be the admiration of all the Londoners.

Improvements in a Felloe Cutting Machine.

Messrs. J. L. Adams and L. H. Moores, of Amherst, Mass., gentlemen long engaged in the manufacture of felloes for carriage and wagon wheels, have lately made some very important improvements in their machinery, which enables them to produce a far greater amount of work and of a superior character than they could do heretofore with the same power.

Machine for Washing Potatoes.

At a late exhibition of the Smithfield Club, England, we see that a prize was awarded for a machine which should attract the attention of our farmers. It was a machine for washing potatoes, turnips, carrots, &c. The roots to be washed were placed in a cylinder made of spars with an Archimidean screw inside, the whole being partly immersed in water. The roots were placed in the cylinder at one end and the cylinder revolved in the water until they were clean, when by turning it in the contrary direction, the washed roots were discharged into a trough at the other end. We hope the hint will not be lost, every labor saving machine to the farmer is a benefit to the whole community.

Gas Light Monitor.

A patent has recently been taken out in England which appears to be a good one for gas consumers. It consists of a circular valve enclosed in a box which is placed before the burner and through which the supply of the gas is furnished to the burner. The burner is a tin plate of brass, perforated in the centre and weighing about fifteen grains; it is quite loose in the chamber which contains it, and the mode of its operation is this:—When the pressure of the gas through the chamber does not exceed a certain fixed amount, the supply to the burner is such as to prevent any waste or smoke, but the moment the pressure exceeds this fixed amount, the valve is raised by it to the top of the chamber, where, by closing all the apertures through which the gas is supplied to the burners the supply is at once cut off,—and what gas is requisite to maintain the light rushes through an aperture pierced in the centre of the valve, the size of which regulates the consumption. The instant the extra pressure diminishes so as to allow the gravity of the valve to exert its force, the valve falls back to its first position at the bottom of the chamber.

Improvement in Propellers.

English papers say that Sir Thomas Mitchell has made successful experiments on a method of propelling through water by the screw,—which avoids the lateral resistance offered to all existing applications of the instrument; and has lett behind instructions for a patent—which is now complete. Sir Thomas expects great things from this construction—no less, we understand, than a performance of 500 miles a day for large steamers. This no doubt is *doubtful*.

Another Flying Machine.

The Boston Post says: "Capt. John Taggart, of Charlestown, is building a machine to navigate the air. We have seen a picture of the balloon, and a minature of the sails and the way he creates a new element with them. President Everett and Threadwell, of Harvard College, and Mr. Pook, the naval constructor, we understand have expressed favorable opinions of the project. Capt. T. has invested $1500, and wants to raise as much more by subscription, in order to complete the carriage for the upper deep by the 4th of July."

Mr. Taggart had better take the advice of Paul, "abide by the ship."

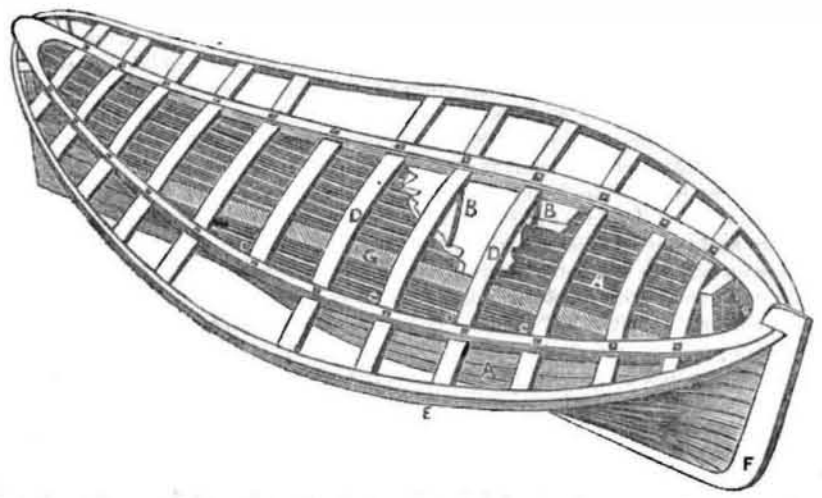
Fac-Similies of Busts.

Mr. Jas. Gall of Edinburg, Scotland, has discovered a method of taking a strictly accurate likeness in form of a bust, by means of a mask of so peculiar a kind, that persons are able to read at ease while the mould is being taken, and which is so light that not a feature is falsified by its weight or pressure. The substance by which he does this is not yet made public, but it is supposed to be Samaritan oil of Gutta Percha dissolved in chloroform. The chloroform evaporates in an instant, leaving a skin of gutta percha, which repeated until thick and resistive enough, would form a mask exceedingly light and delicate.

It is inexplicable to us how the mould can taken and the person reading at the time.

A foreign paper says that a razor has been invented in England which carries with it a guard that makes it impossible to cut the skin when shaving—a statement which appears to be a doubtful *fact*.

IMPROVEMENT IN SHIP BUILDING.



This is a plan of constructing vessels, invented by Mr. G. W. Fellows and brother, of this city, and it is worthy of the attention of our nautical men. Messrs. Fellows are the patentees, and their agent is Mr. W. F. J. Damon, No. 15 South st. The principle is to construct vessels of all kinds, without the use of heavy cumbrous timbers, placing in their stead small round iron or copper ribs, which pass vertically from the keel through the centre of every plank and deck beam where they are secured by large screw nuts which bind the vessel together.

This engraving represents a model hull of a steam boat, but the principle is applicable to all vessels. There is a small part of the side planking removed at B B, to shew how the iron ribs pass vertically through the planking. A is the planking which must be thicker than that in common use for the bore of the ribs, and this can be had as easily as a thinner kind and save inside ceiling. The ribs are made to pass through all the timbers and each rib is secured at the top by a screw nut C, which can be screwed down to match the seams like a piece of cabinet work. D are the deck beams and E the guard rail, F the keel.

The advantages claimed for this method of constructing ships, boats and other vessels, are greater strength, buoyancy, durability, more room according to the tonnage and a general economy. More information about rights, &c. may be obtained of Mr. Damon as above directed.

Cholera Protector.

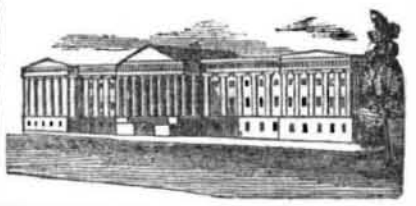
This is a new galvanic belt invented by Mr. Chas. Rodgers of Jefferson, Wisconsin, and the difference between it and the galvanic rings is perceptible at a glance. The invention is the result of practical experience during an extensive practice of 16 years in various parts of the world, and it is based upon sound reason—no guess work about it. Our readers may remember that the presence of cholera in St. Petersburg and other places was accompanied with a diminished quantity of electricity in the atmosphere; this fact has been corroborated by the experience of the inventor. Now it is a well known fact that between our nervous system and electricity, there is a mysterious connection. This belt is to wear round the body to generate and impart to the system the desired quantity of the galvanic fluid.

Fig. 1.

This is a perspective view. A is a plate of copper and B a plate of zinc. E, is a covering of india rubber, and it is covered with silk. D, is the conducting chain indicated by dotted lines in the interior. C are pieces of felt.

Fig. 2.

Is a section view. The same letters indicate like parts. The conducting chain D, is here shown without the india rubber and covering. The intention of the belt is to furnish a continued flow of the fluid especially to the ganglions of the sympathetic nerve and to the nerves of motion and sensation at their origin from the spine. This is accomplished by moistening the pieces of felt with a weak acid solution. The conducting chain is far superior to a wire or ring as it will conform to the motion of the body and it is easy to wear and keeps the plates in contact with the skin. No galvanic belt like this has before been presented to the public. It is constructed on the best principles and it is worthy of general attention. Measures have been taken to secure a patent.



LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending January 2, 1849.

To Ephraim Larrabee, of Baltimore, Md., for improvement in Shower Baths. Patented Jan. 2, 1849.

To J. F. Flanders, of Newburyport, Mass., for Combined Beading Tool and Circular Shears. Patented Jan. 2, 1849.

To R D. Munson, of Williston, Vt., for improvements in attaching and detaching Hubs and Axles. Patented Jan. 2, 1849.

To T. Hopper and T. Garrison, of New Brunswick, N. J., for improvement in Journals and Boxes. Patented Jan. 2, 1849.

To Joseph Ross, of Ipswich, Mass. for improved Swinging Bridge. Patented Jan. 2, 1849.

To Abner Leland, of Milton, Pa., for improvement in Combined Ploughs. Patented Jan. 2, 1849.

To Jesse Layman, of Lebanon, Ohio, for improvement in Ploughs. Patented Jan. 2, 1849.

To A. S. Macomber, of Bennington, Vt. for improvement in Turning. Patented Jan. 2, 1849.

To Edward Clark, of Brooklyn, N. Y., for improvement in the manufacture of Lampblack Colophan. Patented Jan. 2, 1849.

To F. H. Bartholomew, of New York City, assignor to S Merrick, of Springfield, Mass., for Screw Wrench for grasping cylindrical forms. Patented Jan. 2, 1849.

To James McCarty, of Reading, Pa., for method of Bending Skelps from which iron tubes are made. Patented Jan. 2, 1849.

To Charles Chennock, of New York City, for improvement in connecting Hubs & Axles. Patented Jan. 2, 1849.

To Jonathan Beardsley, of Trenton, N. J. for improvement in Machine for Hook-heading Spikes by one operation. Patented Jan. 2, 1849.

Carpet Looms.

At the new carpet factory in Auburn, N. Y. there are sixteen power looms now set in operation, which are of a peculiar and excellent construction, invented by Mr. A. Babbitt.—Each occupies a space of 5 by 8 feet only and turn out about 20 yards of ingrain and three ply carpet per day. The combination of these looms is said to be of a very superior character and the work they perform is of the best kind. It is indeed a triumph of mechanical genius to make the water wheel and steam engine weave the most variegated patterns. A short time since it required two persons to attend every carpet loom.

New Musical Instrument.

An extraordinary musical instrument has just been erected in the Cyclorama, Albany street, London a new exhibition of moving panoramas, about to be opened. This noble instrument contains 4 distinct organs—3 manual and 1 pedal, it has 9 composition with 3 coupling movements, great drum, side drum cymbals, and triangles. It has 53 stops, 16 pedal movements, and 2407 pipes, and will produce all the effects of several bands. It possesses more power than the Apollonicon of former days, and, in the present advanced taste for music, will doubtless excite a corresponding interest.

Everglades of Florida.

One of the subjects recently discussed in Congress, is that of a proposition that the land embraced under this term, shall be ceded to the State of Florida, on condition that the State shall drain them, and in draining them, make a canal in which vessels may save the passage round the Peninsula of Florida and the dangers connected with it. These everglades are one eight of the land of the whole State. We hope that the Canal will be dug at any rate.