



[Reported Officially for the Scientific American.]

LIST OF PATENT CLAIMS Issued from the United States Patent Office. FOR THE WEEK ENDING JANUARY 30, 1855.

IMPLEMENT FOR BORING WELLS—J. W. Adams, of Sharpsville, Md.: I do not claim the hollow auger, G, for that has been previously used. I claim the employment of the screw G, attached to the handle, F, of the swinging or suspended auger, G, arranged substantially as shown, viz., with a knob or projection, h, on its outer surface, which knob or projection catches into a cavity in the under surface of the bail, F, for the purpose of holding the auger in its proper position while being operated. [A notice of this invention may be found on another page.]

I claim the extra hitch plate, c, in combination with the depressed bridge, a, and perforate bridge, b, as set forth. I claim the adjustable bridge pin for the normal strings furnished with a screw and the notches and channels on its two sides, so that the normal strings can be regulated in their relative distances from the octave strings either vertically or laterally, as set forth. I claim making the buff stop of two qualities of leather, a hard and a soft, for producing the harp effect, as set forth.

REIN STAFF SCREWS FOR SHIP CARPENTERS.—John Hobbs, of Hallowell, Me.: I claim the arrangement of the screw stems, C, D, and E, F, passing through the reinforcement, A, B, the sharp threaded screws, G and H, forced into the timber or side of the vessel by the lever, h, inserted in the aperture, k, and the nuts, g, moved by the lever, i, to force the rein staff towards the vessel, together with the set down, L, on each screw, for the purpose of inserting wedges between it and the edge of the plank, to bring the plank into place for splicing on the side of the vessel.

(For the Scientific American.) Remarks on Lateral Motion of the Earth. Mr. H. Pollard, in No. 18, supposes that the direction of the earth's axis is changing, and regards this change as the cause of "the emergence of the new land, and the submergence of the old." That the greater part of the present dry land was once the bottom of the ocean, is undoubtedly true, but it is just as true that the cause of this emergence and submergence is not the lateral motion of the earth. The direction of the earth's axis does not change, this is an established fact, proved above the possibility of a doubt by all astronomical observations, in all times and all countries. One of Mr. P.'s reasons for believing in a lateral motion of the earth, is the well known fact that fossil remains of plants and animals which grow only in tropical and temperate climates, are found near the Arctic regions, indicating a great change of climate. This latter change is, at the present day, generally attributed to the internal heat of the earth itself, the surface of the earth having then not yet cooled down to the present temperature. Mr. H. P. says, the lines of the public surveys, no doubt run on the true or astronomical meridian, vary from the magnetic meridian one degree east for about every twenty years since the surveys were made, and he therefore comes to the most singular conclusion, that the axis of the earth is moving east. If you go aboard a steamer in Liverpool, and find yourself after about twelve days in New York, the conclusion is, New York has moved east towards you, yourself having been stationary. The astronomical meridian never changes, the variations of the magnetic meridian are different at different times, they were for Paris as follows:

Table with 4 columns: Year, Direction (East/West), and values. It lists magnetic meridian variations for Paris from 1580 to 1805.

It may here be stated, that besides these, the secular variations, there are daily variations, which are for Paris as follows: during the night the needle is nearly stationary, at sunrise the needle commences moving west, till about 5 P. M., when the needle moves back east till 9, 10, or 11 P. M. These variations are greater in summer than in winter, from April to September 13 to 15 minutes, from October till March 5 to 6 minutes, on some days 25 minutes, on others only 5 to 6 minutes. South of the magnetic equator, these variations are in opposite directions, the north pole moves east from morning till 5 P. M.

A. Z. Baltimore, Jan. 30th, 1855. [Our mind never has been able to receive the internal heat theory of the earth, as affording an explanation of evidences which have been furnished in abundance, of the cold arctic regions being once the abode of elephants, and other animals now belonging to the tropical regions. It has always appeared to us to be irrational; probably the cause will yet be discovered.]

Life Boat Ships. MESSRS. EDITORS—With reference to an article in the SCIENTIFIC AMERICAN two weeks ago, upon the "Safety of Ships," allow me to correct your rendering of my suggestions for the same, on page 131. It will there be seen that I proposed the adoption of one longitudinal keelson of plate iron, and two transverse bulkheads only of the same. These are all the partitions necessary to divide the hold into six compartments. Since writing to you first upon this subject, I find that the mover of this improvement for constructing life boat Steamers—Mr. Griffiths—advocates its immediate adoption, in his Nautical Magazine. I am glad to find you, as well as our highest naval authorities, so well agreed upon the importance of embodying this principle in any new legislation by Congress upon this subject. PRACTICAL OBSERVER. East Broadway, Jan. 28, 1855.