

INDUSTRY—MANUFACTURES—COMMERCE.

The Steamship Adriatic.—This noble vessel, after having made but one trip to Liverpool, and having ever since been lying idle, is soon to be put on Atlantic service. She is to ply between New York, Southampton, and Havre, and she will commence running early next month. Her last trial trip, it is stated, proved her machinery (as now altered and amended) to be excellent, and it is expected that she will make the fastest voyages of any steamer afloat. She belongs to the North Atlantic Company, and her cabin accommodations are unsurpassed for elegance and comfort.

The Oyster Business.—Our oyster trade is stupendous. The value of oysters packed in tin cans, in Baltimore, amounts to \$3,500,000 per annum, for which no less than \$250,000 worth of tin plate is required. During the past year the entire value of Baltimore oysters amounted to \$4,500,000, and that of Virginia to nearly double this amount. Our oysters are mostly fished in the bays of Maryland and Virginia, and from thence carried to Philadelphia, New York, Boston, and other places. The Southern oysters are never served up in this region, as they come from their native waters; they are too poor for the palates of our epicures. To render them plump and pleasant, they are planted in the waters of Newark Bay and Long Island Sound, where they find the requisite aliment and soon fulfill the old adage "a change of pasture makes fat calves."

Domestic Goods.—There is a great buoyancy in the market for home manufactures of cotton, and business is in a most favorable condition, both for home consumption and export. The stock of woolen goods on hand is pretty large, and the market for them is somewhat depressed. Our total exports since Jan. 1, are as follows:

	Pkgs.	Value.
To British Australia.....	72	\$3,050
Hayti.....	32	2,833
Venezuela (dry goods).....	3	208
Brazil (dry goods).....	1	150
Brazil.....	97	8,755
Cisplatine Republic.....	5	569
Argentine Republic.....	25	1,317
China.....	3,252	187,877
China (dry goods).....	3	243
Total.....	3,460	\$205,002
Previously.....	19,429	1,136,396
Total.....	22,909	\$1,341,398

Another Explosion.—A boiler exploded in the Atlantic Foundry, Imlay-street, Brooklyn, on the 12th inst., by which the engineer (John Hazleton) was instantly killed, and two others wounded. The engine was broken to pieces and the house demolished. The greater portion of the boiler was impelled a distance of 80 feet, when it struck against a house, shattered the wall and fell back upon the side walk. It is believed that the water in the boiler fell below the fireline, and that it became red hot, and when the engineer let on some cold water the explosion at once followed. The evidence thus far elicited, in regard to the cause of this accident, goes to prove that the deceased engineer lost his life by his own carelessness.

The Homestead Bill.—This bill passed the House of Representatives in Washington, on the 12th inst., by a vote of 114 to 66. It provides that every person who is the head of a family, and 21 years of age may enter one quarter section (160 acres) of land, subject to pre-emption, and at the expiration of five years, if then a citizen, shall be entitled to a patent for it on payment of \$10. We hope this bill will also pass the Senate at an early date. We have no doubt but much good will ultimately result from it to many workmen in our cities. The success of this measure is due to the "Land Reformers"—an organization of mechanics which was formed in this city about 15 years ago, and which has ever since continued to labor for this object with much zeal.

The Central Park.—Professor Renwick, in a letter to the New York Times, considers that \$250,000 would have been a most liberal appropriation for embellishing the above park in the style of the "English Garden" near Munich in Bavaria. He says he knows every foot of the ground, that he surveyed the northern portion of it 40 years ago, and is perfectly familiar with the district. He considers the outlays of the commissioners extravagant, and the specifications which had been made by the engineer, for the work to be done, unworthy of the pro-

feSSION, as exhibiting great ignorance of surveying and engineering. A large number of our citizens have remonstrated against the extravagance of the commissioners, and have opposed the appropriations asked for and noticed in our last week's issue.

FOREIGN NEWS AND MARKETS.

The Atlantic Telegraph.—The directors of the Atlantic Telegraph Company have resolved to raise £20,000, to take up and restore to working condition the injured portions of the cable off the Irish and Newfoundland coasts. There have been £600,000 authorized to be raised as new stock by the company, but only £70,000 of this amount has been taken up conditionally.

Exports to America.—The London Times says: "The shipments to the United States (which received a serious check after the panic of 1857) have recovered to a point beyond their former scale, and are now more than 17 per cent of our total exports, foreign and colonial, and 27 per cent of our foreign exports alone. It is to be remarked that our trade with European States is every year becoming of a more secondary character, as compared with that which we have established among our Colonial and American progeny. It is to those quarters that the magnificent augmentation exhibited in the present total over 1858, and which renders it of unprecedented amount, is entirely due. The general increase is £13,831,671, while to the Colonies and the United States it was £14,022,424. The balance of our business carried on with all other parts of the world resulted therefore, in a falling off."

Exports to all the World.—The exports of Great Britain during the year 1859 were as follows:—Exported to British Possessions, £46,125,056; United States £22,611,283; all other countries, £61,764,098; total, £130,440,427; or about \$625,202,135. This is an immense sum, and affords evidence that England is truly "the workshop of the world;" for no other country can approach it in the amount of exported manufactures.

Workingmen's College.—This college, which has now been established in London for several years, has progressed so satisfactorily that the institution has been removed to more commodious premises. During the past year from 200 to 300 students on an average have attended the various classes, which include among others, drawing, arithmetic, mathematics, geology, chemistry, English grammar and composition, Latin, Greek, French, and English, and Bible history. Of the students from October to Christmas, 1858, 109 out of 242 belonged strictly to the class of operatives, the remainder being principally clerks, tradesmen, tradesmen's assistants, and warehousemen. The operatives included, in the largest proportion, carpenters, cabinet makers, piano-forte makers, watch and clock-makers, opticians, printers, compositors, and bookbinders. The total number of students who joined the college in the first year was 400, in the second 350, in the third 260, in the fourth 296, and in the fifth, to the end of the second term, 169, making a total of 1,475. There are classes for women in connection with the college, in which cookery and domestic economy are especially taught, as also reading and writing, and vocal music, arithmetic, history, the Bible, needle-work, and geography.

THE PHOTOGRAPHIC SOCIETY—A CURIOUS PHENOMENON.—The reports of the transactions of the scientific societies now being published in our columns are attracting much attention on account of the rare and useful information contained in them. We would direct particular attention to the remarks of Professor Draper, this week, in the report of the above society, in regard to the phenomena connected with the temperature and incandescence of bodies. He relates a remarkable circumstance regarding the colors of the spectrum being regularly developed as the temperature of a body advances, and in the same order which they are refracted in the prism. This is a philosophical fact, well worthy of being disseminated throughout the whole earth.

SEWING MACHINE CASE.—An important trial has just terminated in Boston between Elias Howe, Jr., and Ladd, Webster & Co., involving the validity of Howe's patent for sewing machines. Mr. Howe won his case. We hope soon to be able to present the points of this suit.



ISSUED FROM THE UNITED STATES PATENT OFFICE FOR THE WEEK ENDING MARCH 13, 1860.

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* Pamphlets giving full particulars of the mode of applying for Patents, size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

27,415.—Ethan Allen, of Worcester, Mass., for an Improvement in Constructing Fire-arms: I claim making or forming notches or catches on cylinders of fire-arms, or other work, by pressing or cutting, or both, in the manner and for the purposes as set forth and described.

27,416.—Edward Andrews and J. H. Carr, of Palo Alto, Pa., for an Improvement in Lubricating Journals: We claim the combination and arrangement of the air-tight chamber, A, tube, B, valve, C, spring, II, and piston, D, with small hole, E, constructed and operated substantially as described.

27,417.—Peter Bailey, of Falls Township, Pa., for an Improvement in Grain Fans: I claim the coupled rods, D and G, and G', jointed to the frame, A, and to the shaker, B, arranged in respect to the inclined plane, b, and sieve, d, and operating substantially as set forth.

27,418.—John Ballou, of Cincinnati, Ohio, for an Improvement in Adding Machines: I claim the construction of the rings, C1 C2 C3, marked on their peripheries with numerals, substantially as and for the purposes set forth.

27,419.—John W. Barcroft, of Friendship, Va., for an Improvement in Ditching Machines: I claim first, The combinations of buckets, or scoops, b, having hinged falling bottoms d, with a guard, E, of such shape that it keeps the bottoms of the buckets from falling, until the proper time for discharging the dirt which has been dug or scooped up, and then allows the bottoms to fall, and after the discharge of the dirt has taken place, raises the bottoms to their original position, ready for another digging or scooping operation. Second, Combining the guard with the frame, a, which carries the buckets by means of brackets, e, having friction rollers, f, suspended on them, substantially as and for the purposes set forth.

27,420.—B. F. Barker, of Belfast, Maine, and I. F. Barker, of Montville, Maine, for an Improved Machine for Sawing Veneers Spirally from the Log: We claim a traversing carriage carrying the devices, substantially such as are described, for holding and rotating the block, and feeding it to the saw, so as to saw it spirally from the periphery in towards the center, substantially as described.

27,421.—Curran Battle, of Warrenton, Ga., for an Improvement in Cotton Seed Planters: I claim the arrangement of the frame, R, seed-box, A, wheels, B, handles, H, bottom, c, c, cog-wheels, P P, the saw-toothed distributing wheel, N, the toothed cylinder, S, the plow, C, and the coverer, O, operating conjointly, as described, for the purposes specified.

27,421.—Joshua Bills, of Southington, Conn., for an Improved Sausage Machine: I claim the spiral shaft, J, passing through the central slots, g, of the heads, L, essentially in the manner and for the purposes fully set forth. I also claim the cutting knife, F, united solidly to a metal bar, G, by its being cast thereon, and forming a cavity, H, in the bottom of case, A, to receive the knife, and so position it by the single screw, I, essentially in the manner and for the purpose fully set forth. I also claim the forward end of the stuffer being concave at C2, and the feeding end having a portion of its spiral wings removed at B2, and inclined planes, m, inserted essentially in the manner and for the purposes fully set forth. I also claim the arrangement of the case, A, the stuffer, X, and its case, W, so that both the cutter and stuffer may be operated in the same case, essentially in the manner and for the purposes fully set forth.

27,423.—C. C. Bomberger, of West Carlisle, Pa., for an Improved Wind Wheel: I claim the arrangement and combination with the slats, C, of the vertical connecting bars, D, vertically moving cam, A, and governing lever, F, so that as the motion of the wheel increases or diminishes, the lever, F, will correspondingly raise or lower the cam, A, and thus regulate the speed of the wheel, all as herein shown and described.

[This invention relates to an improved means for regulating the speed of the wheel, and consists in the use of a cam actuated by a lever connected with a suitable governor, the cam being so arranged with slats composing the wings that the slats will, as the wheel rotates, be closed to a greater or less extent at certain and necessary points of its rotation in order to effect the desired end.]

27,424.—I. W. Bowers, of Cincinnati, Ohio, for an Improvement in Railroad Chairs: I claim providing wrought iron railroad chairs with the curved lips or flanges, A', b, substantially as and for the purposes set forth.

27,425.—C. P. Brockett, E. Todd, and John Brockett, of New Haven, Conn., for an Improved Composition for Cleaning and Silvering Metals: We claim the compound of "silver soap" herein described, consisting of an alkaline solution of silver soap, carbonate of lime and alcohol, in about the proportions stated, and for the purposes of cleaning and plating metals as set forth.

27,426.—Adolph Brown and Felix Brown, of New York City, for an Improvement in Steam Pumps: We claim, first, Connecting together the steam and pump cylinders of steam pumping engines by means of frames or stretchers, which contain the bearings of the crank shaft—constructed and arranged as described, and for the purpose set forth. Second, The hinged valves constructed as above described, when the same are arranged and used in combination with steam pumping engines, as set forth.

27,427.—Walter R. Bush, of Albany, N. Y., for an Improvement in Wheel and Dress Guards for Carriages: I claim, first, The attachment to the door of a carriage of a sliding guard, substantially as set forth. Second, The method of operating such guard by means of a pulley containing a helix spring to raise the guard and maintain it in place; the spring being relaxed by an attachment from the pulleys to the body of the carriage, or by such lever and spring arrangements as are a mechanical equivalent for the same, substantially as set forth in the above specification.