

TO CORRESPONDENTS.

A. H., of Ill.—Prof. Page has long since anticipated you in the construction of a tubular carrying telegraph. His electro-magnetic engine consists of a tube composed of wires, through which a piston is caused to travel with lightning velocity by the application of the galvanic battery. The tube may be made of indefinite length, so that a tubular telegraph for conveying small packages with tremendous speed, might be constructed. The principal difficulty would be the enormous amount of battery power required, and the consequent expense of operating such a telegraph. The grand trouble with all electro-magnetic machines is the cost of working. What is wanted to give them success is a galvanic battery which will eat up less money than the steam engine. Whoever invents this will have made the last great discovery of the age. Your idea of causing a ball to roll on a magnetic bar, placed inside of a non-conducting tube, with a battery inside of the ball, is impracticable; at least we do not conceive of any successful method by which you could make the ball travel, except on Page's plan. It must have required a great deal of courage to attack the inventor your name. You will probably be welcome to all the laurels you win.—Look out that you do not find yourself going up "Salt River" in the next boat after him. It is sad to see brother disagree.

O. S. F., of N. Y.—Wheeled chairs for invalids are quite common; there may be something patentable in your mode of attaching the small steering wheel, provided it effects a new and useful result, either in guiding the chair or cheapening the price.

S. C., of Va.—There is nothing patentable in the use of a piston valve as a safety valve, and we doubt much whether such a device would operate as well as the puppet now used.

C. M., of Mo.—We think F. H. Smith, of Baltimore, Md., can supply you with such a brick machine as you desire. We would state here for the benefit of the makers of all good brick machines, that we have frequent inquiries for such articles, and if some of them would insert a brief advertisement in our columns, we presume it would accommodate many, as well as prove advantageous to themselves.

H. B. N., of Pa.—We cannot determine as to the claim on your gear unless you send a model.

G. S., of Pa.—The use of glass as an anti-friction material in journal boxes and bearings, is quite old and not patentable.

D. C. H., of O.—Patents for improvements (not additional) on machines already patented run 14 years. They are independent of the original grant, so far as duration is concerned. No patents are issued in Canada except to British subjects.

J. M. C., of N. C.—The idea of operating switches by means of a cam or arm projecting from the engine and controlled by the engineer, is not new. There are many devices for the purpose, and among them the essential features of your plan. There is nothing patentable in your arrangement.

H. T., of N. Y.—There is nothing patentable in your propeller. Perhaps a patent could be had on your cobbed.

A. B. C., of —.—It is a very common practice to send telegraphic messages and letters in cypher. There is nothing of patentable novelty in your idea, neither would there be in the detail.

E. S. L., of Va.—Your plan of making ice by elevating tanks of water into the aerial regions of perpetual snow and ice, by means of balloons, is certainly new and patentable. We doubt its economy, however; we think it is far cheaper to cut the ice out of mill ponds. Your plan of making cannons possesses no advantages, and is not patentable. \$2 received.

J. T. & Co.—Your model has arrived. Your improvement in shingle machines strikes us as containing patentable features. It looks as if it was a valuable invention. We will make your claims as broad as they will bear, and will do our best for you throughout. Send on the fee of \$30. \$1 received. You did not give your address or we should have written by mail.

G. L. W., of Md.—Your letters on Spiritualism will receive attention before long.

R. M. S., of N. J.—Get a vertical cylindrical boiler for such a small engine; it requires only to evaporate half a cubic foot of water per hour and contain three cubic feet. It should be of thin iron plate.

H. A. H.—We do not know of any book devoted to Christian names. Copyright costs \$1.

E. S., of Ga.—Your device for feeding water into steam boilers was patented twenty-five years ago, and has been again invented by at least a score of men within four or five years past. We cannot tell why it has never come into general use, as several who have tried it say, as you do, that it works well.

D. A. W., of Vt.—We are not acquainted with a work that treats extensively on flouring mills.

R. M. C., of Pa.—If A buys a patent right for a certain county, B is liable if he uses or sells in any manner in that county, no matter where he got his machine. A is the exclusive owner to the county he purchased.

W. J., of Mass.—One patent would not cover both inventions. There appears to us to be more originality in the last model than in the other. We do not see what could prevent it operating.

A. W., of N. Y.—If inventors will neglect to secure their improvements where they have the opportunity, they must put up with the consequences. We think you are mistaken as to the horse power.

S. N. C., of Ill.—\$13 will cover the cost of illustrating your invention.

G. H. B., of Ga.—Ames' Polygraph, we believe, can be made to reduce or enlarge the copy, but it would increase the expense. We will send your letter to the agent.

D. G. T., of Ky.—We cannot see how it is possible for your condenser to act as you think it will without an air pump. Admitting that when a vacuum shall have been produced water will enter at the bottom and rise in the center tube, and discharge itself into the outer tube, when steam is admitted by the opening of the eduction valve, it will drive the water rapidly down the tube, but we think will condense very little steam, as it will not remain long enough.

R. B., of N. Y.—Your governor is not new; the same thing has been proposed many years ago. We do not know of its ever having been in use. We do not exactly understand your blower, but state for your information that there are rotary blowers in use which collect the air at the periphery and discharge at the center.

C. R. G., of Iowa—Giving a spiral or other form to bullets, for the purpose of making them revolve as they pass through the air, is old and not patentable.

Money received at the SCIENTIFIC AMERICAN Office on account of Patent Office business for the week ending Saturday, Aug. 11, 1855.—

R. G. & Sons, of Mass., \$30; H. N., of Me., \$35; J. W. B., of Ark., \$40; E. G., of N. J., \$30; H. R., of N. Y., \$60; I. C. C., of Mich., \$30; J. C. S., of Mass., \$10; H. H. L., of Ill., \$25; J. A. B., of Ill., \$12; J. A., of Pa., \$25; W. V. G., of Ct., \$70; H. B., & O. S. W., of Ind., \$25; J. H. J., of Iowa, \$25; H. N. S., of Ct., \$30; E. D. C., of Ct., \$10; S. & W. H. B., of O., \$30; E. V. P., of N. Y., \$225; D. N. R., of N. Y., \$77; W. P., of Miss., \$30; G. H. T., of N. Y., \$55; W. S., of N. Y., \$150; J. H., Jr., of Wis., \$155; H. M. C., of Ct., \$10; B. & C., of Mich., \$30; J. A. S., of Pa., \$30; W. M., of N. Y., \$20; B. & H., of N. Y., \$30; C. T. C., of N. Y., \$20; W. & B. D., of Ct., \$25; D. B., of Vt., \$12; S. B., of N. Y., \$35; C. W. S., of Mass., \$25; S. A. K., of Pa., \$20; C. J. C., of Pa., \$50; J. W. H., of R. I., \$150; J. C. H., of N. J., \$30; A. K., of Ct., \$25; C. D. W., of Wis., \$40; R. D. N., of N. H., \$30; J. H., of Pa., \$30; P. H., of N. Y., \$55; S. T. P., of N. J., \$55.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Aug. 11.—

E. D. C., of Ct.; J. A. B., of Ill.; O. S. W., of Ind.; H. H. L., of Ill.; J. A., of Pa.; E. R. B., of Ct.; W. V. G., of Ct.; S. & W. H. B., of O.; F. K., of France; A. P., of France; G. H. T., of Mass; A. K., of Ct.; J. H. J., of Iowa; J. W. B., of Ark.; W. & B. D., of Ct.; S. B., of N. Y.; C. W. S., of Mass.; P. H., of N. Y.; J. L. T., of N. Y.

Important Items.

BACK NUMBERS AND VOLUMES.—We have the following numbers and volumes of the SCIENTIFIC AMERICAN, which we can supply at the annexed prices.—Of Volume 5, 40 numbers, bound, \$1.75. Of Volume 6, all—price in sheets, \$2; bound, \$2.75. Of Volume 8, none complete, but about 30 numbers in sheets, which will be sold at 50 cents per set. Of Volume 9, bound, \$2.75. Of Volume 10, all except Nos. 17, 25, 27, and 28, at the subscription price.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within fourteen years, can obtain a copy by addressing a letter to this office, stating the name of the patentee, and enclosing \$1 for fees for copying.

RECEIPTS.—When money is paid at the office for subscription, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a bona fide acknowledgment of the receipt of their funds.

MODELS.—We are receiving almost daily, models of inventions which have not the names of their inventors marked upon them. This usually prevents us from taking any notice of them whatever. We shall esteem it a great favor if inventors will always attach their names to such models as they send us. It will save us much trouble, and sometimes prevent the model from being mislaid.

PATENT LAWS AND GUIDE TO INVENTORS.—Congress having adjourned without enacting any new laws pertaining to applications for patents, we have issued a new edition of the old laws, which may be had at our counter or sent by mail. This pamphlet contains not only the laws but all information touching the rules and regulations of the Patent Office. Price 12 1-2 cents per copy.

Terms of Advertising.

Table with 2 columns: Lines per insertion and Price. 4 lines for each insertion, \$1; 8 lines, \$2; 12 lines, \$3; 16 lines, \$4.

Advertisements exceeding 16 lines cannot be admitted, neither can engravings be inserted in the advertising columns at any price.

All advertisements must be paid for before inserting.

IMPORTANT TO INVENTORS.

THE UNDERSIGNED having had ten years' practical experience in soliciting PATENTS in this and foreign countries, beg to give notice that they continue to offer their services to all who may desire to secure a Patent at home or abroad. Over three thousand Letters Patent have been issued, whose papers were prepared at this Office, and on an average fifteen, or one-third of all the Patents issued each week, are on cases which are prepared at our Agency. An able corps of Engineers, Examiners, Draughtsmen, and Specification writers are in constant employment, which renders us able to prepare applications in the shortest notice, while the experience of a long practice, and facilities which few others possess, we are able to give the most correct counsel to inventors in regard to the patentability of inventions placed before us for examination. Private consultations respecting the patentability of inventions are held free of charge with inventors, at our office, from 9 A. M. until 4 P. M. Parties residing at a distance are informed that it is generally unnecessary for them to incur the expense of attending in person, as all the steps necessary to secure a patent can be arranged by letter. A rough sketch and description of the improvement should be first forwarded, which we will examine and give an opinion as to patentability, without charge. Models and fees can be sent with safety from any part of the country by express. In this respect New York is more accessible than any other city in our country. Circulars of information will be sent free of postage to any one wishing to learn the preliminary steps towards making an application. In addition to the advantages which the long experience and great success of our firm in obtaining patent present to inventors, they are informed that all inventions patented through our establishment, are noticed, at the proper time, in the SCIENTIFIC AMERICAN. This paper is read by not less than 100,000 persons every week, and enjoys a very wide spread and substantial influence. Most of the patents obtained by Americans in foreign countries are secured through us, while it is well known that a very large proportion of all the patents applied for in the U. S., go through our agency. MUNN & CO. American and Foreign Patent Attorneys, 123 Fulton street, New York; 32 Essex Street, London; 29 Boulevard St. Martin, Paris; 6 Rue D'Or, Brussels.

A GOOD DRAUGHTSMAN WANTED, who is handy in the use of tools, and can take efficient charge of a few workmen. 18 Platt st. 43\*

BAG LOOMS.—Any person who wish to purchase patent rights for bag looms, that make 240 picks per minute, or wishing for looms for weaving seamless bags (out of the State of Maine), will please apply to GEO. COPELAND, North Gray, Me. 1\*

BULKLEY'S PATENT DRY MILLS, by Superior heated Steam, will dry grain, flour, and meal without scorching, at a cost of 2 cents per bushel. Also green lumber in 12 to 24 hours. Circulars sent free on application. H. G. BULKLEY, 49 3/4

TWENTY-SEVENTH ANNUAL FAIR OF THE AMERICAN INSTITUTE of the City of New York. The Managers announce that they have made arrangements to hold this exhibition in the Crystal Palace, commencing on Wednesday, the 3d of October next. This magnificent and spacious building will be opened for the reception of articles, from Thursday, the 27th of September, until Tuesday, the 2d of October. Heavy machinery and other articles from a distance can be stored in the Palace from the 15th of September. Offices will be opened on Fortieth street for the entry and reception of articles. Premiums consisting of Gold and Silver Medals, Cups and Diplomas, will be awarded on the recommendation of competent judges. The Managers would impress upon Exhibitors the necessity of giving immediate notice of the space required for the proper display of the articles they intend to exhibit. Circulars, containing full particulars, can be had on application, at the Office of the Institute, No. 351 Broadway. Communications addressed Wm. B. Leonard, Corresponding Secretary, will meet with immediate attention. By order of the Managers. EDWIN SMITH, Chairman, JOHN W. CHAMBERS, Secretary.

EXHIBITION OF THE MARYLAND INSTITUTE, Baltimore.—The Eight Annual Exhibition by the Maryland Institute, for the promotion of the Mechanic Arts, will be opened on Tuesday, 2d of October next. Goods will be received for exhibition and competition at any time prior to September 27th, and for exhibition merely, as late as 1st of October. The co-operation of the manufacturers, mechanics, artists, and the community generally is respectfully invoked in the immediate preparation of articles for display. All articles deposited must be of American manufacture; the only exception to this rule being in favor of rare specimens in the departments of architecture, sculpture, and painting, which may be taken as merchandise on sale. Circulars, embodying the regulations and arrangements, and blank applications for space, with all other information may be had at any time of the Actuary of the Institute, at the Hall.

JOSHUA VANSANT, Chairman of Exhibition Committee.

PREMIUM SELF-ACTING Drilling Machine.—The most perfect yet produced. The American Institute of New York, and the Massachusetts Charitable Mechanic Association, each awarded it a silver medal and diploma. For sale at the Atlas Foundry, corner of Greene and Wayne streets, Jersey City. Price \$250. J. F. WARD & CO.

IMPORTANT TO QUARRYMEN, Stone Cutters, Contractors, and Builders.—Porter's Patent Spring Hammer Stone Dressing Machine. The Porter Stone Dressing Machine Co., having purchased the patent for the above invention, are now prepared to sell rights to use the same, and to furnish Machines, and erect them at any place within the United States. The Machine may be seen in practical operation at the works of the Company, in the city of New York, on 14th street, between 9th and 10th avenues, where parties interested in the business of working stone, and the public generally, are invited to call and satisfy themselves as to its utility. The Machine is very simple in its construction, and not liable to get out of order. It works with about equal advantage on every kind of stone, and will perform the labor of from twenty-five or fifty men at a total expense of from \$8 to \$12 per day. It produces a finely finished surface, leaves a perfect arris, and cuts moldings with rapidity and beauty. Its operation is precisely that of the mallet and chisel in the hands of the workman. It combines great power with the nicest delicacy, and has received the uniform and decided approval of all practical men. In addition to regular work, it will be tried on any stone, and subjected to any test, that parties examining it may desire. To those who are unable to visit the Machine personally, a circular with engravings and a full description will be sent on application. Office of the Porter Stone-Dressing Machine Co., 37 Wall st., New York. A. B. CAPWELL, Prest. 37 Seow

TWO FARMERS AND ALL OTHERS INTERESTED in Agriculture.—Will be published in October, 1855, "The Year Book of Agriculture, or the Annual of Agricultural Progress and Discovery for 1855," exhibiting the most important discoveries and improvements in Agricultural Mechanics, Agricultural and Horticultural Botany, Agricultural and Economic Geology, Agricultural Zoology, Meteorology, &c.; together with statistics of American growth and production, a list of recent Agricultural Publications, Agricultural Patents, with notes by the Editor on the Progress of American and Foreign Agriculture for the year 1855. By DAVID A. WELLS, A. M. The Year Book of Agriculture will be published in 1 Vol. 12mo., of 400 pages, and will contain an elegant steel portrait of a distinguished agriculturist, together with illustrations of mechanical improvements, stock, fruits, &c. Although the publication of this work will be attended with very heavy expenses, it will be published at the low price of \$1.25, thereby enabling every farmer to possess a copy. On receipt of the published price it will be sent free per mail to any part of the United States. As the sale will be very large, all orders should be sent immediately. A. LEECH & PETERSON, Publishers, 121 Arch street, Philadelphia.

SAWS.—PATENT TEMPERED AND MACHINE-GROUND SAWS. Circular Saws manufactured on these improved principles can be used thinner and with less set, and can be run faster than any hitherto made. All sizes warranted perfectly even in thickness and temper, and made of the very best material. HENSHAW & CLEMSOM, 21 Exchange st., Boston. 49 7\*

SAFETY RAILROAD DRAWBRIDGES AND Self-Locking Switches, (Patented.) This invention will secure to the traveling community perfect safety while journeying on railroads. The apparatus is so arranged that simultaneously with the opening of a draw, switches (on each side of the river) are unlocked and moved to connect with inclined sidings; and at the same time signals, attached to the switch bars are made to indicate that the draw is open. The self-locking switches can be used separately at any of the turn-outs of a railroad, and thereby prevent the constantly recurring accidents occasioned by neglect of bolting switch levers, as these switches bolt and unbolt themselves when moved by the draw of a bridge or the lever at a turn-out. For the purchase of rights under the patent or inspection of a model, apply to J. K. HAMBLE & BROTHER, No. 5 Margaretta st., near Front, Philadelphia. 49 4\*

MATHEMATICAL INSTRUMENTS.—The undersigned furnishes, free of charge, on application, to all part of the United States, his new Illustrated Catalogue of Mathematical, Optical, and Philosophical Instruments. C. T. AMSLER, 211 Chestnut st., Philadelphia, Pa. 3leow3m\*

VENTILATION.—The undersigned has devised and patented the only system by which a spontaneous ventilation can be effectually carried out in buildings, vessels, railroad cars, &c., and will sell to parties desirous of purchasing of the same at a reasonable price. Address H. RUTAN, Coburg, Canada. 49 13\*

WROUGHT IRON PIPE.—Boiler Flues, Globe Valves, Cocks, Steam Gauges, Gauge Cocks, Oil Cocks, and every variety of fittings and fixtures for steam, water, and gas, manufactured and sold by JAMES O. MORSE & CO., No. 79 Johnst., N. Y. 49 12\*

TWO MACHINISTS AND ENGINEERS.—METALLIC OIL, patented by Cumberland Brothers April, 1842. This Oil is manufactured and sold by the undersigned, the genuine article, \$1.85 per gallon. Also Yokney's Improved Lubricating Oil, possessing all essential properties for oiling, both light and heavy machinery, to the same degree as sperm oil, in packages containing from 5 to 300 gallons, to be had only of the manufacturer. This Oil is uniform in quality, is free from unpleasant odor, is not inflammable, although excellent for burning in lamps, and it will not, under any circumstances, corrode or gum on machinery. AUGUSTUS YOKNEY, 49 2\*

THE WOODRUFF & BEACH IRON WORKS, of Hartford, Conn., L. B. HANKS Agent, No. 313 Broadway, New York. Will furnish to order high and low pressure Steam Stationary Steam Engines and Boilers. Also all kinds of machinery for Powder, Paper, Sugar, and Flouring Mills, and every description of Iron, Brass, and Composition Castings, Lathes, Shafts, &c., of the best quality of materials and workmanship on liberal terms. 47 1\*

NORCROSS ROTARY PLANING MACHINE.—The Supreme Court of the U. S., at the Term of 1853 and 1854, having decided that the patent granted to Nicholas G. Norcross, of date Feb. 12, 1850, for a Rotary Planing Machine for Planing Boards and Planks is not an infringement of the Woodworth Patent. Rights to use the N. G. Norcross's patented machine can be purchased on application to N. G. NORCROSS, 208 Broadway, New York. Office for sale of rights at 208 Broadway, New York. Boston, 27 State street, and Lowell, Mass. 42 6m\*

THE EUROPEAN MINING JOURNAL, Railway and Commercial Gazette. A weekly newspaper, forming a complete history of the Commercial and Scientific Progress of Mines and Railways, and a carefully collated Synopsis, with numerous Illustrations, of all New Inventions and Improvements in Mechanics and Civil Engineering. Office 25 Fleetstreet, London. Price \$6.50 per annum.

POWER PLANERS.—Persons wanting Iron Planers of superior workmanship, and that always give satisfaction, are recommended to the New Haven Manufacturing Company, New Haven, Conn. 40f

LATHES, PLANERS, and all kinds of Machinists' Tools of the best description on hand and made to order by SHRYVER & BROS., Cumberland, Md., (on Baltimore and Ohio R. R., midway between Baltimore and the Ohio River.) 43f

ANDREWS & JESUP.—Commission Merchants, Cotton and Woolen Machinery, Steam Engines, Machinists' Tools, Belting, &c., Importers and Dealers in Manufacturers' Articles; No. 67 Pine street, N. Y. 33 1Y

MACHINISTS' TOOLS.—Manufacturers, Mechanics and Railroad Supplies, Locomotive and Stationary Engines, Steam Boilers, Belting, Cotton and Woolen Machinery, Water Wheels, Pumps, Blowers, &c. FOSTER & LEACH, 25 Broadway, N. Y., Selling Agents of the Lawrence Machine Shop. 36 13\*

NEW HAVEN MFG. CO.—Machinists' Tools, Iron Planers, Engine and Hand Lathes, Drills, Bolt Cutters, Gear Cutters, Chucks, &c., on hand and finishing. These Tools are of superior quality, and are for sale low for cash or approved paper. For cuts given full description and prices, address, "New Haven Manufacturing Co." New Haven, Conn. 40 ly

HARRISON'S GRINDING MILLS.—Latest Patent.—\$1000 reward offered by the patentee for their equal. A supply constantly on hand. Liberal Commissions paid to agents. For further information address New England Manufacturing Co., New Haven, Conn., or to S. C. HILLS, our agent, 12 Platt street, New York 13f

A. BELY, Counsellor at Law, 52 Washington street, Boston. Will give particular attention to Patent Cases. Refers to Messrs. Munn & Co., Scientific American. 16 ly\*

VAIL'S CELEBRATED PORTABLE STEAM Engines and Saw Mills, Boat and Horse Pumps, Smut Machines, Saw and Grist Mill Irons and Gearing, Saw Gummers, Ratchet Drills, &c. Orders for light and heavy forging and castings executed with dispatch. 8 ly\* LOGAN VAIL & CO., 9 Gold st., N. Y.

ONE THOUSAND YOUNG MEN of small means can make over 100 per cent. in a new, respectable and easy business in universal demand. Apply (enclosing stamps) to COOK & CO., Detroit, Michigan. 48 2\*

1855.—WOODWORTH'S PATENT Planing, Tonguing and Grooving Machines.—The subscriber is constantly manufacturing, and has now for sale the largest and best assortment of these unrivalled machines to be found in the United States. Prices from \$35 to \$150. Rights for sale in all the unoccupied Towns in New York and Northern Pennsylvania. JOHN GIBBSON, Planing Mills, Albany, N. Y. 43 10\*

JACK SCREWS AND HYDRAULIC JACKS.—For sale at manufacturers' prices, by FOSTER & LEACH, 25 Broadway, N. Y. 37 13\*

AMERICAN PLATE GLASS COMPANY.—(Factory Williamsburgh L. I.) are now prepared to execute orders for rough Plate Glass, suitable for floors, skylights, vault, and deck lights. Prompt attention will be given to orders left at their office, 442 Broadway, or their agent, J. R. PLATT, 70 Murray st. 42 8\*

CAPITALISTS WANTED TO TAKE PATENTS Abroad.—Mr. L. C. Evans of Spring Hill, Ala., has just taken a valuable patent in this country for an improvement in plows, and desires to find some person who will, for an equal share of the invention in England or any other foreign country, pay the fees necessary to take the patent. The cost would be about \$350 for England, \$150 for France, etc. For particulars address L. C. EVANS, Spring Hill Post Office, Ala. 47 3\*

TWO MANUFACTURERS.—THE AMERICAN Water Wheel Co., Wareham, Mass., are now manufacturing to order, Warren's Turbine Water Wheels, from new and improved patterns got up expressly for manufacturers. These turbines are made in the most perfect manner, and on the most scientific principles. Cotten and woolen manufacturers will do well to examine them before purchasing elsewhere. We also manufacture a cheap turbine on nearly the same plans, but with less finish and less cost. They are well adapted to grist mills and small manufacturing establishments. J. WARREN, Agent, A. WARREN, Treas.

GRAIN MILLS.—EDWARD HARRISON, of New Haven, Conn., has on hand for sale, and is constantly manufacturing to order, a great variety of his approved Flour and Grain Mills, including Bolting Machinery, Elevators, complete with Mills ready for use. Orders addressed as above to the patentee, who is the exclusive manufacturer, will be supplied with the latest improvements. Cut sent to applications, and all mills warranted to give satisfaction. 45 f\*

SUPERIOR MACHINISTS' TOOLS.—CARPENTER & PLASS, foot of 30th st., East river, N. Y., are now building, and have constantly on hand, Lathes, Drills, Planing Machines, Slotting Machines, Bolt Cutters, Gear Cutters, Surfacing Machines, or will make to order any other tools of any capacity required. The above Tools combine all the latest improvements, and the best workmanship. 48 2\*

VERGES' ELECTRO-CHEMICAL BATHS.—200 6th Avenue. Professor Verges discovered, some three years ago, a method for extracting metallic substances from the human system, such as mercury, lead, silver, arsenic, etc., by means of electro-chemical baths; and also to cure all diseases generated by them, viz.: Dyspepsia, Rheumatism, inflammatory or chronic Paralysis, Painter's Colic, etc. This theory has created much sensation both in this country and Europe, and has, in all cases accomplished what it claims. Not being able to attend to the numerous calls he has daily from the afflicted, Prof. Verges has made an arrangement with Dr. Hinckson, who will hereafter be in attendance, for the purpose of assisting in giving the baths, and also giving medical advice. N. B. The theory will be fully explained and certificates given to all competent persons who desire to establish similar baths. 47 4ew\*

PORTABLE STEAM ENGINES.—S. C. HILLS, No. 12 Platt st., N. Y., offers for sale these Engines, with Boilers, Pumps, Heaters, etc., all complete, and very compact, from 2 to 10 horse power, suitable for printers, carpenters, farmers, planters, &c. A 2 1/2 horse can be seen in store. It occupies a space 6 by 3 feet, weighs 150 lb., price \$240, other sizes in proportion. 29 5w\*

JAMES F. STARRETT & SON, Pattern and Model Makers, No. 352 West 27th street, near 11th Avenue, New York. Machine Patterns and Inventors' Models of every description made to order with dispatch. 45 5ew\*

## Science and Art.

## The Art of Dyeing.—No. 34.

**DYEING FEATHERS**—In our last article the method of dyeing feathers black was described, and although it was not intended originally to say any more respecting them, another article on the subject will be found useful to many, as such information is difficult to obtain.

The feathers of birds colored with the richest hues, are one of the most beautiful ornaments in animated nature. Some savage nations have exhibited great skill in blending the beautiful feathers of birds into various articles of dress, but the ancient Mexicans carried the arranging of colored feathers to such a degree of perfection as to use them the same as we do feathers. Feathers are used in dress in all countries, and it will have been observed that they become fashionable ornaments about every ten years.

All feathers in their natural state are somewhat greasy, and resist efforts to color them in that condition. This grease must first be removed by steeping them for about fifteen minutes in very strong warm soap suds, after which they are washed, and are fit to be dyed. Being of an animal substance, their nature is akin to that of wool and silk. The same coloring matters and processes are therefore employed to dye them as for silk dyeing, only they require a little higher temperature of liquor, and more time in it. They are colored by themselves in small neat copper kettles, and carefully handled. By using the same substances, therefore, and pursuing the same methods as those described in the foregoing articles for dyeing silk, the same kinds of colors will be produced on feathers. The strength of the mordants and the dye stuffs must be proportioned to the weight of feathers. Blue is colored with the sulphate of indigo; yellow with turmeric made slightly sour with vitriol, and red with cochineal. Logwood, muriate of tin, and a little tartar will color them purple, and a mixture of the sulphate of indigo and turmeric will dye them green. Feathers for ladies' hats, however, should never be colored with turmeric, because sunlight soon dissipates it; fustic therefore should be used in place of the turmeric. Orange can be dyed with anato. They can be dyed a most beautiful gold color by giving them a light dip in annato, then dyeing them a full yellow on the top with a liquor of quercitron bark and the muriate of tin at a scalding heat. A rich maroon can be dyed by steeping the feathers for an hour in a strong hot liquor of peachwood, and a very little alum and logwood.

If feathers are carefully handled they can be dyed more easily than silk. Our farmer's daughters, by following the above directions, and using the receipts presented in preceding articles, may dye white feathers any color they choose.

It will have been noticed that some artificial ostrich plumes have exceedingly long and delicate fibers. These are not natural, but made by tying a number of fibers together. This work must be done with great care, so as to have the knots very small. These fibers are gracefully curled and very showy; the curling is also done by art, and in a most simple manner.

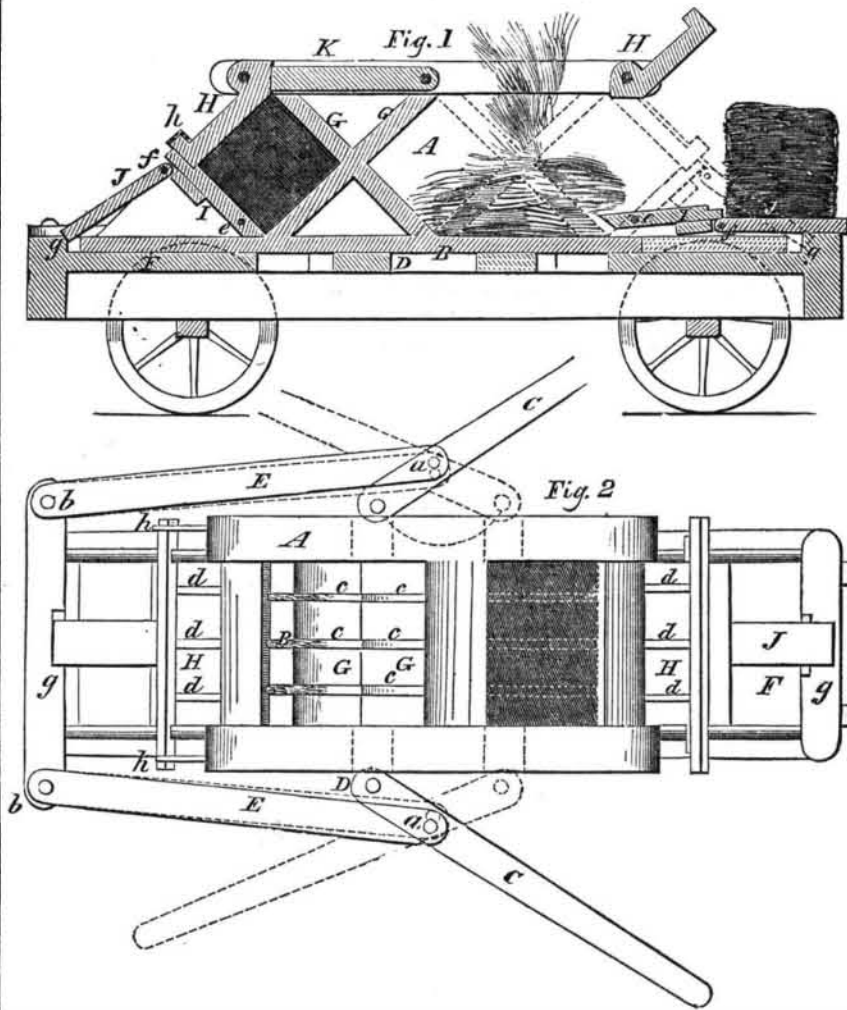
Before the feathers are quite dry (after being dyed,) these fibers are drawn a number of times between the thumb and the edge of an ivory knife, like that used by book folders, and from this action become beautifully curled. This operation must be performed delicately, and continued until the feather is dry. To facilitate the operation, it is generally carried on before a fire. The curls thus produced will not come out again until the feather becomes wet. A feather may be dyed in variegated colors by suspending it by a cord and immersing one end in the dye liquor, then the other in a different liquor. Thus, to color one part of a feather yellow and the other green, suspend or hold the feather in a turmeric or fustic liquor, then take it out and wash it, and add a little sulphate of indigo to the same liquor, and hold that part of it to be dyed green (excluding the part to be kept yellow) in it for ten minutes, when it will be colored green. In this way, by carefully handling in different dye liquors, one feather may be dyed so as to have part a

purple, another part yellow, another part blue, another green, and another red. This art is a very interesting one to practice. By a little ingenuity and taste, many young ladies might introduce some new and beautiful articles of domestic manufacture composed in part of colored feathers.

## Regatta.

The Regatta of the New York Yacht Club took place at Glen Cove on the 3rd inst. The winner was a small sloop, 18 tons burden, named the *Katydid*. The *Widgeon*, a new yacht by George Steers, though not the winner, was esteemed the best sailer.

## MANNY'S IMPROVED HAY PRESS.



The annexed figures represent an improved Hay Press, for which a patent was granted to Pells Manny, of Waddam's Grove, Ill., on the 17th of April last.

Fig. 1 is a vertical longitudinal section of the press, the plane of section being through the center, and figure 2 is a top view of the press. Similar letters indicate like parts.

A represents a rectangular box or case having a sliding bottom, B, to each side of which, at about its center, there is attached by a pivot a lever, C. The levers are attached to the ends of a cross piece, D, which is secured to the under side of the bottom, B. The fulcras of the levers, C, are at the ends of levers or arms, E E, shown at a, fig. 2, and the levers or arms, E E, are secured by pivots, b, at one end of the base or platform, F, on which the box or case, A, is secured. To the upper surface of the center of the sliding bottom, B, there are secured two followers, G G, which are also inclined as to cross or intersect each other at right angles, fig. 1. These followers correspond in width to the interior of the box or case, A, as shown in fig. 2. The upper parts of the followers above the point of intersection have longitudinal slots or recesses, c, cut in them, as shown in fig. 2.

To each end of the box or case, A, and at its upper part there is attached a door, H, which is so arranged as to be allowed to swing up and down, the upper cross pieces of the doors having their ends fitted in the top side pieces of the box or case, so as to turn therein. The doors, H, have slots or recesses, d, cut through them.

The ends of the sides of the box or case, A, are not vertical but inclined, so that when the doors, H H, are down or closed, they also will be inclined at angle of 45 deg., and corresponding with the inclination of the followers, G G. The doors, H H, when closed cover only about one half the ends of the box or case, A, (the upper parts,) and there are consequently other doors, I I, one at each end of the box or case, which are secured to it by pivots, e, which pass through the sides of the box or case and into the sides of the doors. The doors, I I, when raised or closed are also inclined but in a re-

verse position to the doors, H H. The upper ends of the doors, I, rest or bear against the lower ends of the doors, H, and the doors, I, are secured in a closed state by bars, J, one end of which is secured by pivots, f, to the upper ends of the doors, I, and the opposite ends fit in notches or recesses, g, in the ends of the base or platform, F. The upper doors, H H, are secured in a closed state by hooks, h, which catch over the lower cross-piece of the doors. To the upper part of the box or case, A, and at about its center there is attached a lid, K.

Suppose the operation of pressing to be now first commenced. The doors, H I, at each end of the box or case, A, are closed and the hay to be pressed is placed in the box or case, A, at one side of the lid, K, and the lid is then closed over the hay. Power is then applied in any proper manner to the levers' C C, and the sliding bottom, B, is moved, and with it the followers, G G, and the hay is compressed in the form of a square bale between the doors, H I, at one end of the box or case, and the followers, G G, it being understood that the upper part of one follower, and the lower part of the other, form the face or pressing surface at each side of the two followers, and as the doors, H I, are inclined to correspond inversely with the followers, it follows that the hay will be compressed in the form of a square bale. When the hay is compressed the doors, H I, are opened and the bale withdrawn. The slots, c and d, afford facilities for hooping the bale. While the hay at one end of the box or case is being compressed, or while the bale is being hooped or removed, hay is placed in at the opposite end to be compressed at the return movement of the followers.

By this press, a bundle of hay is pressed at each movement of the followers, and consequently no time is lost in running back the followers and hooping the bale, as this is done while the box or chest is being filled for the succeeding bale. By having the followers and box or chest so arranged as to press at each movement of the followers, the levers, C, are allowed to have a short purchase, as the followers are not required to be moved so far to

receive the same amount of hay, consequently a proportionate amount of power is gained by having the followers and doors in inclined positions, as shown, the hay is compressed towards the center of the bale, and the pressure which in the mass of presses is exerted against the sides of the box or case, is in a great measure avoided.

More information respecting this convenient press for hay, cotton, &c., may be obtained by letter addressed to the patentee at Waddam's Grove.

## Death of an American Engineer in Europe.

Major T. S. Brown died at Naples on the 30th of June last. He was at one time chief engineer of the New York and Erie Railroad. He was selected by the Emperor Nicholas to fill the place made vacant by the death of Col. Whistler. He lost his health in Russia, and while seeking relief in a more genial climate, he departed this life.

## Literary Notices.

**THE NATIONAL MAGAZINE**.—This high-toned moral magazine for August, contains a wood cut and sketch of the lamented Rev. G. G. Cookman, who was lost on board the steamship *President*. It also contains the "Acadia" of Longfellow, illustrated with many beautiful engravings. It also contains a very good short sketch of James Watt, but the wood-cut of his statue accompanying it, is a very indifferent one in deed.

**THE WESTMINSTER REVIEW**.—This able foreign Quarterly, for July, has been promptly issued by Messrs. Leonard Scott & Co., 54 Gold street. It contains articles on Spinoza, International Immorality, Self-Education, Physical Errors of Teetotalism, The Earth and Man, the Foreign Policy of the United States, and Contemporary Literature. It is a splendid number. The Reviews, published by L. Scott & Co., are the best in the English language.

**COACHMAKER'S MAGAZINE**.—This excellent Magazine for August, contains an engraving of the neatest Phaeton, named "Saladee's Extension Phaeton," we ever saw; besides this, there are engravings of a new Sulky, a light Rockaway, and a Box Buggy. It is an excellent number.

**THE MINING MAGAZINE**.—This most useful Magazine has not been published lately so regularly as heretofore; we regret this, because it is so ably conducted, and contains so much thoroughly scientific information relating to Mining and Geology. Edited by Wm. J. Tenney, 93 Broadway.

**NAUTICAL MAGAZINE**.—This Magazine for the present month contains some capital articles. It asserts that ship-building is but in its infancy, and has the "go-a-head" spirit in it. It is edited and published by Griffiths & Bates, 115 Nassau.

**THE COTTON PLANTER**.—This is a small but a very excellent monthly, edited by N. B. Cloud, M. D., La Place, Ala. The two last numbers contain beautiful illustrations of the cotton plant in its various stages, accompanied with excellent essays on its culture and uses.

**MUSIC**.—Oliver Ditson, Boston, has just published two new and beautiful pieces, viz., "Meet by the Running Brook," a duet; and "Moonlight Hours," a quartette, the poetry and music by J. G. Clark, a young poet and composer of music, and the author of quite a number of exceedingly sweet and popular pieces.



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