# Scientific American.

#### TO CORRESPONDENTS.

D. H., of N. Y.-You ask for a cement for belting to supersede rivets, and which will withstand the effects of both oil and water. We cannot give you the required information, for rivets are the only "cement" that we know of, which can withstand these influences.

H. M. P., of Mass.-Your experiments go to show that you are in a fair way of discovering perpetual motion. but you do not seem to have tested the heat of your air The flame of the lamp proves nothing positively, since there might be a great deal of heat wasted in the first that was absorbed in the last experiment.

C. C., of New York-Minifie's Drawing Book is the first one we would recommend for you; study it well. and you may teach yourself. We cannot give you any more information about the Cooper Institute. If you send to "Yale," you can get a catalogue of the course

B. F. S., of Mass.-Chain-shot is old and well known but the balls were not made like yours, which appear to be new, and so far as we know, patentable. Machines for cutting files have been patented, but we cannot send you the numbers you speak of.

J. L. S., of Ky .- The company's notice stated that gut ta percha goods could be made from a material 50 per cent. cheaper than india rubber, and why the goodscost only 5 per cent. less, we cannot tell. The hose made from it is no doubt as strong as those made of india rubber, but we cannot tell you how it will stand the action

J. M. C. fofVt. - Youcan make any matches you chooswithout fear, so far as we know.

J. K., of Pa.-There is some novelty in your manner o operating car brakes, but we do not discover any fea-ture of utility not already possessed by brakes in common use. It has often been suggested to brake on the track instead of the periphery of the wheel-there are objections to it.

E. M. H., of N. Y.—We do not remember the name o the patentee of the revolving anvil block.

J. D. E., of Mass.-We do not now remember the ad dress, of J. H. R., of N. C., an advertisement in our columns would reach him.

R. W. C., of Pa.-Haupt's work on bridge building is a good one. Appleton & Co., 200 Broadway, are the pub lishers.

S. G. L., of Phila.-We can see no possible chance for you to obtain a patent on your blower. It does not ap-

pear to embrace any novelty.

A. W., of Ohio.—The use of rings and springs instead of hemp for packing pistons, is a well known device In our last volume you will find an engraving of one constructed on that principle.

W. H. W., of N. Y.-A teakettle constructed upon es sentially the same plan as yours was described in this paper a few weeks since.

H. M., of Ohio.-We understand your sketch, and if you will examine the plan of John Fitch, as employed on his first boat, you will see that your's resembles it in principle and action.

A. L., of Ill.—We suppose the apparatus you speak of might feed the mammoth press, but not having seen it we cannot say positively.

S. E. H., of Ohio.—Your electro magnetic rotary en gine is not new; such machines are well known here.

the bow, is on exhibition in the Crystal Palace, it will operate a little. If the first deed is void that you speak can you not give a second deed? if you have the right you have the power.

G. E. I., of N, Y.—A hollow axle is not patentable. We cannot advise you to make an application.

C. T. S. of N. Y.—The employment of india rubber for

the tread of car wheels is not new or patentable.

J. B. W., of N. J.—We think the plan you describe of using gutta percha tubes for feeding paper upon printing presses, is not essentially different from the use of metallic tubes, with the mode of producing a vacuumwell known to you. A model of the latter device we have in our office, and a novel one it is, too. Your application has not been heard from since your last model was sent to the Office, and it is impossible for us to inform when an answer may even be expected.

S., of Pa.-We donot see any advantage to be gained from the use of "eccentrics," as you propose.

M. Newman, 2nd. of Lanesboro, Pa., wishes to obtain good malleable iron castings, and knows not who to a

C. R. S., of Vt.—The notices of extended patents ar not sent from the Patent Office, therefore we have no way of procuring them.

J. M. G., of N. H .- We have never known of a thresher constructed in the manner described and shown in your letter. We think it is new. You speak as though you doubted our statement in regard to the hav cutter, and call upon us to state where and when we saw it. We cannot answer the question—it is not necessary that we should answer it-our opinion remains unchanged, you can reject it or not.
R. B., of N. J.—We suppose we sen't you Ketchum's

claims in full. "The Elongated Aperture" is not in his claim, but was patented by Forbush in 1849; it is for "an open triangular tooth or triangular hollow tooth for cut ting grass or grain." It is however owned by Howard & Co., the builders of the Ketchum machines.

J. A. McM., of N. C.—Apparatus for indicating the distance travelled by a train, isold. We discover no new feature in your plan.

W. C. C., of C. W .- The true rule to obtain the horse power of your high pressure engine is to multiply the pressure of the steam on the area of piston in square inches, into the velocity, and divide by 33,000, this is the nominal power. But there is oftentimes a difference of 3 lbs. between the pressure in the boiler and the cylinder. You must look to this, and also deduct 25 per cent for friction. Your 60 lbs. pressure, we presume, is meant to be above that of the atmosphere. This is the common

E.B. F., of N. Y.-If vou can point out the misstatement in our article on reapers we will consider it.

W. D., Jr., of Pa.—We will examine your model when

it reaches us: we can judge of the invention more cor

E. R., of Pa.-At the Fair of the American Institute, last year, a brake was shown which operated in the same manner as yours—it is old.

M. L. U., of Ill.-The cam motion has been employed for operating sickles of reaping and mowing machines, H. S. A., of N. Y.—In No. 29, Vol. 8, you will find our opinion fully expressed in regard to the "Engineer's

J. V. A. W. of Ill —If fraud has been practiced upor the Office by Mr. P., the Court has a right to take cognizance of it. We cannot advise you satisfactorily upon the subject, not being familiar with the details.

A. P., of N. J .- We are inclined to think your alleged improvement in car brakes, possesses novelty sufficient to warrant an application for a patent. You had better send us a model.

Money received on account of Patent Office business or the week ending Saturday, Nov. 26:-

G. H. H., of Pa., \$20 ; J. G. H., of Fla., \$35 ; J. McD., of Ct., \$20; D. B., of N. J., \$40; J. H., of Tex., \$20; D. & S. K. F., of N. Y., \$55; T. G. S., of N. J., \$30; E. D., of Vt., \$30: G. M. R., of N. Y., \$10; R. W. D., of N. Y., \$25; W. Z. W. & J. W. C., of N.Y., \$25.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Nov. 26:-

J. D., of Pa.; G. H.H., of Pa.; M. H., of N. Y.; W. Z. W. & J. W. C., of N. Y.; J.H-R., of N. Y.; E. D., of Vt.; J. D., of Pa.

#### A Chapter of Suggestions, &c

ALL GONE, ALL GONE.-At the commencement of the present volume, we printed 5,000 extra copies, which we concluded would be sufficient for the subsequent demand. It is now but eight weeks since Volume Nine was commenced, and to the disappointment o many we are obliged to announce that the entire editions of two numbers, 1 and 2, are all gone, and that we shall not be able to furnish the back numbers to any parties who order after this date.

Missing Numbers—Mail Subscribers who have failed to receive some of the numbers of Vol. 8, are informed that we are able to supply them with any of the num-bers, from 1 to 52, except the following, and these we are entirely out of-Nos. 2, 3, 4, 10, 12, 14, 15, 16 17, 18, 19, 20, 21, 22, 25, 26, 47, 48, 49, 50, 52.

PATENT LAWS, AND GUIDE TO INVENTORS-We publish and have for sale, the Patent Laws of the United States -the pamphlet contains not only the laws but all infor mation touching the rules and regulations of the Pa tent office. Price 12 1-2 cents per copy.

RECEIPTS-When money is paid at the office for subscrip tions, a receipt for it will always be given, but when subscribers remit their money by mail, they may con sider the arrival of the first paper a bonafide acknow ledgment of the receipt of their funds.

BACK NUMBERS AND VOLUMES-In reply to many interrogatories as to what back numbers and volumes of the Scientific American can be furnished, we make the following statement: Of Vols. 1, 2, 3, and 4-none. Of Vol. 5, all but six numbers, price, in sheets, \$1; bound, \$1,75. Of Vol. 6, all; price in sheets, \$2; bound, \$2,75. Of Vol.7, all; price, in sheets, \$2; bound, \$2,75. Of Vol. 8, all; price, in sheets, \$2; bound, \$2,75.

GIVE INTELLIGIBLE DIRECTIONS—We often receive letters with money enclosed, requesting the paper sent for the amount of the enclosure, but no name of State given and often with the name of the post-office also omitted Persons should be careful to write their names plainly when they address publishers, and to name the post office at which they wish to receive their paper, and the State in which the post-office is located.

PATENT CLAIMS—Persons desiring the claim of any inver tion 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.

PATENTEES—Remember we are always willing to execute and publish engravings of your inventions, providing they are on interesting subjects, and have never appeared in any other publication. No engravings are inserted in our columns that have appeared in any other journal in this country, and we must be permit ted to have the engravings executed to suit our own columns in size and style. Barely the expense of the engraving is charged by us, and the wood-cuts may be claimed by the inventor, and subsequently used to advantage in other journals.

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### American and Foreign Patent Agency.

MPORTANT TO INVENTORS.—The undersigned where the series of streetly confidential. Private consultations are some than the patent office: you can order the Commissioner to send it to us.

H. D. E., of N. H.—The adaptation of a waterwheel to any other purposes than those for which it was originally intended, without any change in contrivance, could not be patented. Some changes have lately been suggested on the apparatus used for drying straw boards. We are not able to make them public.

W.B., of New York—Your silvering liquor, is the nitromuriate of silver. Mix it with water. But what do you want to use it for?

MPORTANT TO INVENTORIS.—The undersigned having for several years been extensively engaged in procuring Letters Patent for new mechanical and chemostreasonable termic Laiventors under the mostreasonable termic Laiventors when the mostreasonable termic Laiventors was their office from 9.A. M, until 4. M. Inventors, however, need not incur the expense of attending in person, as the preliminaries can all be express, or any other convenient medium. They shaul a to be ever 1 foot square in size, if possible. In the chief cities of Europe. W.B., of New York—Your silvering liquor, is the nitromuriate of silver. Mix it with water. But what do you want to use it for?

WEIGHING AND PACKING MACHINE—This machine is particularly a dapted for the weighing and packing of ground spices, coffee, teas, saleratus, cream tartar, British luster, arrowoot, drugs, prepared flour, farina, starch, cocoa, oat meal, yeast powders, seeds, snuff, ground herbs, or any like material, which may require to be put in packages, from ounces to pounds. Its advantages over the old method of packing by hand, are manifest. One of these machines will, with the aid of one person, weigh accurately, and pack neatly, from 4 to 5,000 packages per day. It requires very little power to run it, and is not liable to get out of repair. Having purchased the exclusive right to manufacture and sell throughout the United States, we are prepared to execute orders for the machines or sale of sectional rights, on reasonable terms. N. B. HARRIS & Co., Proprietors of the Excelsior Steam Spice Mills, Philadelphia, Pa.

TRON FORGE FOR SALE—Located at Rondout Ulster Co. N. V. on tide vector with the restaurance of the restauran RON FORGE FOR SALE—Located at Rondout, Ulster Co., N. Y., on tide water, within three hours of New York, by railroad. The machinery consists of one large class double Reverbrating Furnace with necessary tools; one 25 horse-power Steam Engine, and one 1200 lb. Nasmyth Steam Hammers, with ample boiler capacity for both; one Ainden's Blowers, three feet diameter; one set blacksmith's tools. The buildings and machinery are new, of the best description, and in perfect order for immediate operation. The buildings are ample for the shelter of additional furnaces and machinery. The whole is well adapted for a wire mill, axle, or spike factory or any kind of iron works, there being abundant room for extension. The location is at the terminus of the Delaware and Hudson Canal where Lackawana coal can be received direct from canalboats. Apply to CHARLES M. DUPUY, Jr., Rondout, Ulster Co., N. Y.

POREMAN WANTED—A thorough machinist is wanted to take charge of a shop now extensively engaged in tool building. Liberal wages, and permanency, to a competent person with good recommendation. STEELE & STANNARD, Steuen street, Jersey

TEAM ENGINES FOR SALE—Four new hori-zontallign pressure, of 12, 18, 30, and 66 horse power of superior design and workmanship, with bollerscom-plete. Also new GearLattes, fron Planers, and other machinery. Inquire at J. BURNSS Engineers' and Contractors' Office, 192 Broadway, corner of John street, New York.

TEAM ENGINE-50 horse power for sale cheap.—Apply between 2 and 6 P. M., to C. MORRIS, 109 East 18th, st., Third avenue, N. Y.

CLOCK'S FOR CHURCHES. COURT HOUSES. &c.—Regulators for Astronomical purposes, Jewel lers; also Time Pieces for Session Rooms, Railroad Stations, Chices, &c., which for accuracy of time and dura bility have proved (it is believed) equal to any made it Europe or this country. Glass Dials for illumination and other kinds furnished. Address SHERKY & BY RAM, Oakland Works, Sag Harbor, N. Y. 10eowtf

PUROPEAN PATENTS.—MESSRS. MUNN & CO. pay especial attention to the procuring of Patents in foreign countries, and are prepared to secure patents in all nations where Patent Laws exist. We have our own special agents in the chief European cities; this enables us to communicate directly with Patent Departments, and to save much time and expense to applicants

PRITISH COMMERCIAL LIFE INSURANCE
COMPANY—London and America.—Capital &8.

10.404. Referees in New York—His Excellency Hamilton Fish, late Governo of the State of New York; Anthony Barciay, Esq., H. B. M. Consul, Stephen Whitney, Esq., James Galatin, Esq., Samuel Wetmore, Esq., Hen. Typerinnell, Esq., Hon. Judge Campbell, John Cryder, Esq., J. Phillips Phemix, Esq., John H. Hicks, Esq. The Company has been in successful operation upwards of thirty years; it offers the following advantages to Insugranted on policies; half premium may remain on loan no extra charge for crossing the Atlantic, California and Australian risks taken. The profits under the Mutual Principle are divided every six years. Bomuse paid in eash; last bonus celared was \$34 per cent. LUMLEY FRANKLIN, GEO.M. KNEVITT, Agents, 65 Waltsteet, New York.

which appears in No. 11, present Volume Sci. Am., may be obtained of E. D. & G. DRAPER, Hopedale, Milford Mass., or of ANDREWS & JESUP, 70 Pine street, New York.

MACHINIST'S TOOLS—STEELE & STANNARD, Jersey City, N. J., have on hand, and are building constantly, Lathes, Planing Machines, Drillers, and other Iwols, of a superior character; double gear heavy Drilling Machines, to take in 48 inches in diameter; general character of Tools extra heavy.

BAKER'S IMPROVED STEAM BOILER FUR-nace, as used at the Crystal Palace, &c. Apply to J.AMORY, 28 State st, Boston, General Agent. 11 tf

STFAM WORKS FOR SALE—Land 40x60 feet; 3 story building, fire-proof boiler house; 10 horse engine and tubular boiler, side planer; cutting, splitting, and upright saws, wood lathes, baluster, fence pale, boring, ship plug and bung machine, &c. &c. All new and in perfect order. Employing 12 men. Subscriber's health has failed him. Price \$7.300: on favorable terms, or he world retain on interest. ould retain an interest. E.A. HILL, 105\* Decatur st, East Boston. Mass.

Cochran's QUARTZ CRUSHER—These machines having proved by practical operation at various gold mines their superiority over all others, for pulverising Quartz Rock, are recommended with confidence to parties in want of such machinery. A machine can be seen in daily operation in this city, on application to JOHN S. BUSSING & CO., 48t

UDSON MACHINE WORKS and Iron Foundry
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for castings for railroads, bridges, buildings, gas pipes
and posts, water pipe, cast-iron ornamental floors, cannon, &c. Steam engines and boilers, high and low pressure, sugar mills, Cornish lifting and forcing pumps for
mines, also superior hydraulic pumps and presses, and
superior machinists tools made to order. Especial attention given to the making of patent machines. Orders by mail will receive prompt attention.

T. H. LANG, (late foreman at the New York Novelty
Works), F. COOK, H. McCLELLAND.

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ACHINERY, S. C. HILLS, No. 12 Plattist, N. Y. IV dealer in Steam Engines, Boilers, Leon Planers Lathes, Universal Chucks, Brills; Kase's, Yon Schmiet's and other Pumps; Johnson's Shingle Machines; Woodworth's, Daniel's, and Law's Planing Machines; Dick's Presses, Punches, and Shears; Morting and Tennoning Machines; Betting; Machinery Oil, Beal's Patent Cob and Corn Mills; Burr Mill and Grindstones; Lead and Iron Pipe, &c. Letters, to be noticed, must be post-paid.

B. HUTCHINSON'S PATENT STAVE Cuto ting Machines—The best in use, and applicable
alike to thick and thin staves, for barrels, hogsheads,
&c., also his Head Cutting and Turning, and Stave-Jointing and Crozing Machines. This machinery reduces the
expense of manufacturing at least fifty per cent. For
machines or territorial rights, apply to C. B. HUTCHINSON & CO., Syracuse, N. Y.

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ModDWORTH'S PATENT PLANMoulding machine.—Ninety-nine hundredths of all the
planed lumber used in our large cities and towns continues to be dressed with Woodworth's Patent Machines.
Price from \$150 to \$800. Two machines are at the Grystal Palace. For rights in all parts of New York and Northern Pennsylvania, apply te JOHN GIBSON. Planing
Mills, Albany, N. Y.

United States Patent Office, Washington, Nov. 12, 1853.

On THE PETITION of Samuel S. Allen, of Salem, in the County of Salem, and State of New Jersey, formerly of Mainishurg, Ohio, praying for the extension of a patent granted to him on the 15th day of January, 1840, to which improvements were added on the 29th day of March, 1841, for an improvement in Machines for Husking and Shelling Corn, for seven years from the expiration of saidpatent, which takes place on the 15th day of January, eighteenhundred and fifty-four—
It is ordered that the said petition be heard at the Patent Office on Saturday, the 14th of January next, at 12 o'clock, M.; and all persons are notified to appear and showcause, if any they have, why said petition ought not be granted.

Persons opposing the extension are according to the December 2015.

not be granted.

Persons opposing the extension are required to file in the Patent Office their objections, specially set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing must be taken and transmitted in accordance with the rules of the office, which will be furnished on application. with the rules of the omce, which will be turnished on application.

Ordered, also, that this notice be published in the Union, Intelligencer, and Evening Star, Washington, D. C.; Pennsylvania, Philadelphia, Pennsylvania; Evening Post, and Scientific American, New York: Boston Post, Boston, Massachusetts, and Patriot, Concord, New Hampshire; Enquirer, Gincinnati, Ohio, once a week for three successive weeks previous to the fourteenth day of January next.

Charles Mason,
Commissioner of Patents.

P. S.—Editors of the above papers will please copy and send their bills to the Patent Office, with a paper containing this notice.

TENTS—The undersigned will procure Letters Patent for the Provinces of Nova Scotia and New Brunswick, and will promptly forward all information relative to such matter, upon the receipt of a reasonable fee.

PETER STUBS.

Barrister, Attorney at Law and Notary Pul St. John, N. B.

PAGINEERING.—The undersigned is prepared to furnish specifications, estimates, plans in general or detail of steamships, steamboats, propellers, high and low pressure engines, boilers and machinery of every description. Broker in steam vessels, machinery, boilers, &c. General Agent for Ashcroft's Steam and Vacuum Gauges, Allen & Nøyes' Metallic, Selfadjusting Conical Packing, Faber's Water Gauge, Swell's Salinometers, Dudgeon's Hydraulic Lifting Press, Roebling's Patent Wire Rope for hoisting and steering purposes, etc. CHARLES W. COPELAND, 7 13\* Consulting Engineer, 64 Broadway-

NICHOLS' PATENT PARAGON SAFETY CANS and Glass Metallic-lined Lamps.—These beautiful glass lamps protect againstbreakage as well as against explosion. They are infinitely superior to all others. Orders addressed to the N. E. or Sandwich Glass Cos., Boston, Mass., will be promptly answered. 10 10\*

THE NEW HAVEN MANUFACTURING CO.-New Haven, Conn. having purchased the entire right of E. Harrison's Flour and Grain Mill, for the United States and Territories, for the term of five years, are now prepared to furnish said mills at short notice. These mills are unequalled by any other mill in use, and will grind from 20 to 30 bushels per hour of fine meal, and will run 24 hours per day, without heating, as the mills are self-cooling. They weigh from 1400 to 1500 lbs., of the best French burr stone, 30 inches in diameter; snugly packed in a cast-tron frame, price of mill \$200, packing \$5. Terms cash. Further particulars can be had by addressing as above, post-paid, or to S. C. HILLS, agent N. H. M. Co., 12 Platt st., N. Y.

NEW HAVEN MANUFACTUITING COMPANY
—Tool Builders, New Haven, Conn., (successors to Scranton & Parshley) have now on hand \$25,000 worth of Machinists Tools, consisting of power planers, to plane from 5 to 12 feet; slide lathes from 6 to 18 feet long; 3 size hand lathes, with or without shears; counter shafts to fit all sizes and kinds of universal chuck gear cutting engines; drill presses, index plates, boil cutters, and size slide rests—The Company are also manufacturing steam engines. All of the above tools are of the best quality, and are for sale at 25 per cent. less than any other tools in the market. Cuts and list of prices can be had by addressing as above, post-paid. Warehouse No. 1 Platts t. New York, S. C. BLLS, Agent N. H. Manufacturing Co.

BLANING, TONCLING, AND GROOVING—BEARDSLEE'S PATENT. Practical operation of those Machines throughout every portion of the United States, it working all kinds of word, mas proved then to be superior to any and all others. The work they produce cannot be equalled by the hand plane. They work from 100 to 200 feet, lineaf measure, per minute. One magning has planed over twenty millions of feet during the last two years, another more than twelve collions of feet Spruce Cooring in ten months. Working models can be seen at the Crystal Palace, where further information can be obtained, by of the prefetter at Albays, N. tion can be obtained, or of the parentee at Albany, N. Y Ltf. GEO. W. HEARDSLEE.

PARSONS' SELF-STRAINING SAW—Requires only ten pounds' weight to strain it, and combines the advantages of both muley and gate or sash mills will bear as much feed, is as easily kept in order, will cut as much lumber with one-fourth less power, and is nsuccessfuluse in five States. A working model is in the Crystal Palace, where further information can be had, or of the proprietor at Wilkesbarre, Penn., JAMES JONES. S.E. PARSONS, Agent.

PATENTS OF INVENTION—ISAAC B. FUTVOYE, Patent Agent, Quebec, undertakes to procure letters patent of invention for the Province of Canada. I. B. F. will dispose of any kind of Patented Articles on Commission.

B. ELY, Counsellor at Law, 52 Washington street,
Boston, will give particular attention to Patent
Cases. Refers to Messrs Munn & Co., Scientific American.

EONARD'S MACHINERY DEPOT, 109, Pearl st., and 60 Becaver, N. Y.—Leather Banding Manufactory, N. Y.—Machinist's Tools, a large assortment from the "Lowell Machine Shop," and other celebrated makers. Also, a general supply of mechanics' and manufacturers' articles, and a superior quality of oak tanned Leather Belting.

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OGAN, VAIL & CO., No. 9 Gold st., New York.-Agency for Geo. Vail & Co., Speedwell Iron Works Morristown, N. J., furnish and keep on hand Portabl Steam Engines of various sizes, Saw and Grist Mill Iron Steam Engines of various sizes, Saw and Grist Mill Irons, Hotchkiss's Water Wheels, Iron Water Wheels of any size, Portable Saw Mills, complete; Bogardus's celebrated Planetary Horse Powers; heaving forgings and castings for steamboats and rolling mills, Ratchet Drills of superior quality for machinists, Saw Gummers, Hand Drills, Tyre Benders, and shafting and machinery generally.

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