## Beientifie, American.

## TO CORRESPONDENTS.

T. W., of Ky -Several attempts have been made to use steam carriages on common roads; in point of economy they will not answer.

S. W., of Pa.—The method of treating journals is very good, it is similar to Babbitt's. The difference between the liquid and the gas of carbonic acid is 2000, that is, 1 cubic inch of the liquid will expand to 2000 cubic inches; it is however, very difficult to tell the exact expansion of this acid, for it is exceedingly sensitive to heat and cold.

H. W. H., of Va. - We will wait until you arrive with your model, so as to obtain more pointed information respecting its merits.

W. F, of Mass.-We understand you now; you may rest assured that you could obtain no "power" equal to that expended in revolving or vibrating your machine.

C. S. of Mass.-We believe that the faculty of judging of colors is as strong and universal in men as women. We do not see a reason for placing the evidence of this faculty in the eye-brow; we do not know a single person afflicted with this disease.

S., of E.-We cannot see how your funnel boiler feeder can operate at all.

Z. E. C. of Ct.-There is a mode of reducing hard steel so as to make it forgible; the mode you can find in any good work on metallurgy; it would occupy too much room to give you the information through our columns.

B., of Mo.—We are not aware of an apparatus in existence for making ice, without an air-pump and freezing mixtures, that is, in warm and in temperate weather.

J. K. F., of Ohio-The "relay magnet" is for the purpose of closing the circuit to make the local bath tery operate the receiving magnet; this was a great improvement when invented. Your plan cannot meet the case, as the size and multiplicity of magnets are not the things required.

W. T. C, of Ohio—There is no patent on the chain pump; we do not know the price of the article in this market; your subscription expires with No. 26, Vol. 9.

A.H. & Co., of Mass.-We will endeavor to procure and publish the specification of Mr. E.'s patent. J. S., of N. Y.—The extra weight will be an object

tion to the car; so much so as to preclude the possibility of its introduction; one ton and a half is too much of an increase in the weight of a single passenger car.

E. D., of Pa.—As we understand your letter (your pencil sketch is too obscure), your steam pump is operated upon the same plan as that of Worthington & Baker's; as described by you, it appears to be the same, only you take your steam at the middle of the slide, which is not new.

J. P., of N. C.-There are no infallible rules for detecting counterfeit money; it requires practice 

of banding and pullers in use as that which you propose, and consider it patentable if useful; but w cannot see any advantage to be derived from it; experience, however, and fair trials have perhaps proved its advantages to you, and you can therefore prove its utility.

C. L. R, Jr, of Ct.—Get Gwynne's pump; for more information see the advertisement in some of your recent back numbers of the Sci. Am.

Money received on account of Patent Office busi ness for the week ending Saturday, Aug. 27:-

G. W. B., of N. Y., \$372,50; W. & C., of Ill., \$30; G. J. P., of Mass., \$30; L. P., of Vt., \$50; F. & R., of Vt., \$25; H. L., of Mass., \$25; R. K., of Mass., \$40; W. C., of Va., \$30; B. D. S., of Va., \$105; T. & Sons, of N. Y., \$200; J. J., of N. Y., \$55; E. J. M., of Conn., \$30; G. C., of Me., \$35.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday

L. P., of Vt , (2 cases); D. E. McD., of Mass.; G. H., of N. Y.; J. W. M., of Ala.; J. R. M., of Ohio; H. F. B., of Mich.; J. C , of N. Y.

## A Chapter of Suggestions. &c.

To CORRESPONDENTS .- Condense your ideas into as brief space as possible, and write them out legibly, always remembering to add your name to the communication. Annonymous letters receive no attention at this office. If you have questions to ask, do it in as few words as possible, and if you have some invention to describe, come right to the business at the commencement of your letter. and not fill up the best part of your sheet in making apologies for having the presumption to address us. We are always willing to impart information if we have the kind solicited.

FOREIGN SUBSCRIBERS .- Our Canada Scotia patrons are solicited to compete with our citizens for the valuable prizes offered on the next volume. [It is important that all who reside out of the States should remember to send 25 cents additional to the published rates for each yearly subscriber—that amount we are obliged to pre-pay on postage.]

RECEIPTS .- When money is paid at the office for subscriptions, a receipt for it will always begiven but when subscribers remit their money by mail, they may consider the arrival of the first paper a bonafide acknowledgment of the receipt of their

PATENT LAWS, AND GUIDE TO INVENTORS .publish, and have for sale, the Patent Laws of the United States. The pamphlet contains not only the laws but all information touching the rules and regulation of the Patent Office. Price 121-2 cts. per copy.

BINDING .- We would suggest to those who desire to have their volumes bound, that they had better send their numbers to this office and have them executed in a uniform style with their previous volumes. Price of binding 75 cents.

MISSING NUMBERS.—Subscribers who have failed to receive some of the numbers during the year, can have them supplied by stating what numbers are missing at the time of remitting for the new vo-

INFALLIBLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was pre-paid has expired, and the publishers will not deviate from that standing rule in any instance.

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 Volumes 1, 2 3 and 4-none. Of Vol. 5, all but six numbers. price, in sheets, \$1; bound, \$175. Of Volume 6, all; price in sheets, \$2; bound, \$2,75. Of Vol. 7 all; price in sheets, \$2; bound, \$2,75. Of Vol. 8, all the back numbers subsequent to No. 27, but none previous.

PATENT CLAIMS-Persons desiring the claims 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 pa tentee, and enclosing one dollar as fee for copying PATENTEES-Remember we are always willing to execute and publish engravings of your inventions, provided 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 permitted to have the engraving 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 inother journals.

Give Intelligible Directions—We often receiv letters with money enclosed, requesting the paper sent or the amount of the enclosure but no name of Stategiven, 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.

The above chapter of variety we have inserted for the mutual benefit of our patrons and ourselves. If our subscribers will retain in mind the suggestions contained in the above paragraphs, they will be likely to be benefitted thereby; besides they will save us much valuable time and a good deal or perplexity.

## ADVERTISEMENTS.

CARDING MACHINE.—The subscriber has for sale a first-class Carding Machine (manufactured by Jenks, near Philadelphia.) Is nearly as good as new, and will be sold at a great sacrifice. It can be seen on application to Jas. B Beers, No. 49 John street, N. Y.

A PRACTICAL MACHINIST—Wants a situa-tion in the draughting room; he speaks Spanish, French, and English, and can produce the best tes-timonials for proficiency and character. Please ad-dress Philadelphia P. O., Box 1093, or for further particulars of Dr. FRUCHTWANGER, 141 Maiden Lane. 51.2\*

STEAM ENGINES FOR SALE—Three new horizontal Engines of 15 05 12 00 CTEAM ENGINES FUR SALE—Inree new nu-rizontal Engines, of 15, 25, and 60 horse power, with boilers complete; also new gear, lathes, and other machinery. Inquire at J. BURN'S Engineers and Contractor's Office, 192 Broadway, corner John street. New York. 51 2\*

UNITED STATES PATENT OFFICE, }

UNITED STATES PATENT OFFICE,
Washington, July 28, 1853.

ON THE PETITION OF JOHN H TIMS, of
Newark, N. J., praying for the extension of a
patent granted to him on the 31st day of October,
1839; for an improvement in bearings and oil boxes
forrailroad cars, &c., for seven years from the expiration of said patent, which takes place on the 31st
day of October, 1853.

It is ordered that the said petition be heard at the
Patent Office on Monday, the 3rd of October next,
at 12 o'clock, M.; and all persons are notified to appear and show cause, if any they have, why said petition ought not to 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 testimous filed by either party to
be used at the said hearing, must be taken and trausmitted in accordance with the rules of the office,
which will be furnished on application.

Ordered, also, that this notice be published in the

Ordered, also, that this notice be published in the Union, Intelligencer, and Evening Star, Washington, Post, New York; Boston Post, Boston, Mass, and Inquirer. Cincinnati, Ohio, once a week for three successive weeks previous to the third day of October

Inquirer. Cincinnati, Ohio, once a week for three cess ive weeks previous to the third day of Oct next, the day of hearing CHARLES MASON, Commissioner of Paten.

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

RUROPEAN PATENTS—MESSRS MUNN & Co.

pay special 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 avenues to applicants. and expense to applicants.

ARON KILBORN,—No. 4 Howard st, New Haven, Ct., manufacturer of Steam Engines, Boilers, &c. Noiseless Fan Blower, a superior article, for smith's work, steam engines, brassand iron founders, and machinery in general. 50 10\*

A TKINS' SELF-RAKING REAPER—The un-A TKINS' SELF-RAKING REAPER—The unaqualled success of this machine, both in grain and grass, and the information already received from agents, shows the demand another season will be more than I can supply. Every reaper heard from (about 30 in seven different States and Canada) gives good satisfaction with no drawbacks, though others yet to hear from may have given trouble. Arrangements must be made to supply the demand, and the inventor (Mr. Atkins) would like to realize something from the patentat once, and part of the States may be offered for sale If a satisfactory price cannot be got, then arrangements may possibly be made with manufacturers to build and pay a patent fee. A machine can be seen at the Crystal Palace, and others will be at some of the State and County Pairs this Autumn. "Prairie Farmer" Warehouse. Chicago, Ill. Aug. this Autumn.

"Prairie Farmer" Warehouse, Chicago, Ill, Aug.
495\*

L AWRENCE SCIENTIFIC SCHOOL, Harvard AWRENCE SCIENTIFIC SCHOOL, Harvard University, Cambridge, Mass. The next term of this institution will open on the first day of Sept., 1853, and continue 20 weeks. Instruction by recitations, lectures and practical exercises, according to the nature of the study, will be given in Astronomy, by Messrs. Bond; Botany, by Prof. Gray; Chemistry, Analytical and Practical, by Prof. Horsford; Comparative Anatomy and Physiology, by Prof. Wyman, Engineering, by Prof. Eustis; Mathematics, by Prof Pierce; Mineralogy, by Prof. Cooke; Physics, by Prof. Lovering; Zoology and Geology, by Prof. Agassiz. For further information concerning he School, application may be made to Prof. E. N. Horsford, Dean of the Faculty.

Cambridge Mass. July 16, 1853.

Cambridge, Mass., July 15, 1853.

WANTED—The address of a machinist who understands making machinery for manufacture WANTED—The address of a machinist who understands making machinery for manufacturing an improved gun lock. I shall want a machine for pressing the hammer, for pressing the dog, for forming the end of the main-spring, for punching the slotin the plate, for making and heading the different sized screws required; a drilling machine, and all the necessary machinery for griading and polishing the different parts of the lock; engraving the plate, and, in fact, every thing necessary for the rapid and economical production of said locks, except the motive power. Address WM. HENRY, Jr., Wooster, Ohio.

1852 TO 1856 .--- WOODWORTH'S PA 1002 tent Planing, Tongueing, Grooving Rabeting, and Moulding Machines.—Ninety-nine, hugdredths of all the planed lumber used in our largecities and towns continues to be dressed with Woodworth's Patent Machines. Price from \$150 to \$76. For rights in the unoccupied towns and counties of New York and Northern Pennsylvania, apply to JOHN GIBSON, Planing Mills, Albany, N. Y. lamtf

PALMER'S PATENT LEG-Manufactured by Palmer & Co., at No. 5 Burt's Block. Springfield, Mass., for New England and New York State, and 376 Mass, for New England and New York State, and 376 Chesnut st, Philadelphia; in everyinstance of competition in the Fairs of the various Institutes of this country, has received the highest awards as "the best" in mechanism, usefulness, and economy. At the "World's Pair." London, 1851, in competition with thirty other varieties of artificial legs (by the best artists in London and Paris,) it received the Prize Medal as the best.

COCHIN CHINA FOWLS—I have for sale, by COCHIN CHINA FUW LO-1 HAVE IV. SELLO, The pair, young Cochin China fowls, of the best blood in America, and desirable for their great size their symmetry, and line plumage. Address RCD 50.2\* NEY L. ADAMS, Lyons, N Y.

NORRIS WORKS, Norristown, Pa. The subscribers build and send to any part of the United States, Pumping, Hoisting, Stamping, and Portable Engines, and Mining. Machinery of every description. THOMAS, CORSON & WEST. 40 1y.

NORCROSS ROTARY PLANING MACHINE, Machine, Machine—I now offer my Planing Machines at a low price; they are not surpassed by any machines as to amount or quality of work. Tongue; ing and grooving machines also for sale, doing one or both edges as desired; 80 machines now in operation. Address me at Lowell, Mass., tion. A N. G. NORCROSS.

A NDREWS & JESSUP—No. 70. Pine street New York, Commission Merchants for the sale of all kinds of Cotton and Woolen Machinery, Machinists' Tools, Belling, &c. Importers and dealers in every

variety of manufacturers' articles. RIGINEERING—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 & Noyes' Metallic Self-adjusting Conical Packing, Faber's Water Gauge, Sewall's Salinometers, Dudgeon's Hydraulic Lifting Press, Roebling's Patent Wire Rope for hoisting and steering purposes, etc. etc.

CHARLES W. COPELAND,
29 26\* Consulting Engineer, 64 Broadway.

Consulting Engineer, 64 Broadway.

A TMOSPHERIC TELEGRAPH—The English patent (just issued) is now offered for sale at the Company's office, 24 Merchant's Exchange, Boston, Mass.

1. S. RICHARDSON,

RUPP'S (London Council Medal 1851) CELE-BRATED CAST STEEL—Of any dimensions, warranted superior to any other for Platers and other Rollers requiring hardening; also for hydraulic and other pistons, railway axles, and shafts for steam engines, not exceeding 3000 lbs. in weight, &c. &c. This cast steel admits of welding without borax with the same facility as iren. THOMAS PROSSER & SON. 28 Platt street, New York. 32tf borax with the same facility as iron. THE PROSSER & SON, 28 Platt street, New York.

Mcallister & Brother—Opticians and Mealers in mathematical instruments, 48 Chesnutst, Philadelphia Pa. Mathematical instruments separate and in cases, Protractors, Spacing Dividers, Drawing Pens, Ivory Scales, Tape Measures, Salometers, Spy Glasses, Microscopes, Hydrometers, &c. &c. An illustrated and priced catalogue will be sent by mail free of charge.

A GOOD CHANCE FOR MANUFACTURING —A Water Privilege of ten feet fall, on a neverfailing stream, with four acres of choice land, in the town of Cornwall, Orange Co, N. Y., 5 miles from the North River, and three miles from the railroad depot, and on the line of survey of the Albany and Hoboken RR. For particulars inquire of John J. Vanduser, 184 Canal st, N. Y., or John Orr, on the premises.

NEW METHOD FOR MAKING WROUGHT-I Iron direct from the Ore—The proprietors of James Renton's Patent, who have purchased Alex. Dickerson's patent for the above purpose, are de-Dickerson's patent for the above purpose, are desirous of introducing the invention, into general use, and invite parties who may wish to negotiate for rights for States and counties, or for furnaces, to make immediate application, and to examine the furnace which is in successful operation at the American Iron Company's Works, Newark, N. J. The invention is exciting considerable interest; gentlemenfrom all parts of the country, who are engaged in the manufacture of iron, have examined the furnace in its workings, and give it their decided commendation. A circular, giving more minute information, will be sent to those desiring it. The rights for several States and counties have already been disposed of. Applications for rights in the State of New Jersey may address the Hon. J. M. Quinby, President of the American Iron Company. Inquiries or applications for other States may be made to A. H. BROWN, Newark, N. J. Office 107 Market st. 34tf applications for other States may be made to BROWN, Newark, N. J., Office 107 Market st.

PEARDSLEE'S PATENT PLANING Tongue D ing and Grooving Machines—These celebrated machines have now been generally introduced in various portions of the United States. More than machines have now been generally introduced in various portions of the United States. More than thirty are now in successful practical operation in the State of New York alone. As an illustration of the extent of work which they are capable of performing, with unrivalled perfection, it is sufficient to state that, within the last six months and a half, over five millions of feet of spruce flooring have been planed, tongued and grooved by one of these machines at Plattsburgh, N. Y. never running to exceed ten hours a day. The claim that the Beardslee machine was an infringement upon the Woodworth patent, has been finally abandoned; and after the proofs had been taken, the suit instituted by the owners of that patent was discontinued, and the whole controversy terminated on the first of November last. Applications for machines or rights may be made to the subscriber, GEO. W. BERMBSLEE, 57 State street, or No. 764 Broadway, Albany.

THE NEW HAVEN MANUFACTURING Company, New Haven, Conn., having purchased the entire right of E. Harrison's Flour and Grain Mill, for the United States and Territories, for the 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-iron 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.

MACHINERY.—S. C. HILLS, No. 12 Platt-st. N. Y. dealer in Steam Engines, Boilers, Iron Planers, Lathes, Universal Chucks, Drills; Kase's, Von Schmidt's and other Pumps; Johnson's Shingle Machines; Woodworth's, Daniel's and Law's Planing machines; Dick's Presses, Punches and Shears; Morticing and Tennoning machines; Belting; 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. ELY. Counsellor at Law. 52 Washington B. ELY, Counsellor at Law, or washing out, Boston, will give particular attention to Cases. Refers to Munn & Co., Scientific

TEOWARD'S MACHINERY BEPOT, 109

Jearl-st. and 60 Beaver, N. Y.—Leather Banding
Manufactory, N. Y.—Machinists's Tools, a large as
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chanics' and manufacturers' articles, and a superior
quality of oak-tanned Leather Belting.

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PAINTS, &c. &c.—American Atomic Drier Graining Colors, Anti-friction Pasts, Gold Size, Zinc Drier, and Stove Polish. QUARTERMAN & SON, 114 John st., Painters and Chemists.

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Works, Norristown, N. J., furnish and keep on hand
Portable Steam Engines of various sizes, Saw and
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Water Wheels of any size, Portable Saw Mills, complete; Bogardus's celebrated Planetary Horse Powers; heaving forgings and castings for steamboats
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Drill, &c. Weight of Axle Lathe, 5,500 lbs; price
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\$225 to \$675,

BROWN & WHITE,
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PORTABLE S'FEAM ENGINES—The subscri-DRTABLE STEAM ENGINES—The subscriber is now prepared to supply excellent Portable Engines, with Boilers, Pumps, Heaters, etc., all complete, and very compact, say 1, 2, 2 1-2, 3, 4, 6, and 10 horse-power, suitable for printers, carpenters, farmers, planters, &c., they can be used with wood, bituminous, or hard coal; a 2 1-2 horse engine can be seen in store, it occupies a space 5 feet by 3 feet, weighs 1500 lbs., price \$240; other sizes in proportion.

27eott Machinery Agent, 12 Platt st, N. Y.

THE NEW HAVEN MANUFACTURING CO. No. 2 Howard st. New Haven, Ct., are now finishing 6 large Lathes, for turning driving wheels, and all kinds of large work; these lathes weigh tons, and swing 7 1-3 feet, shears about 16 feet long. Cuts and further particulars can be had by address ing as above, post-paid, or to S. C. Hills, agent N.H. M. Co., 12 Platt st, N. Y. 28tf.

EE & LEAVITT - Manufacturers of every description of Cast Steel Saws, No. 53 Water street, between Walnut and Vine, Cincinnati, O. 27 cm \*