

fee required on filing an application for a patent is \$15. Other changes in the fees are also made as follows.—

On filing each caveat	.....\$10
On filing each application for a Patent, except for a design	.....\$15
On issuing each original Patent	.....\$20
On appeal to Commissioner of Patents	.....\$20
On application for Re-issue	.....\$30
On application for Extension of Patent	.....\$50
On granting the Extension	.....\$50
On filing a Disclaimer	.....\$10
On filing application for Design (three and a half years)	.....\$10
On filing application for Design (seven years)	.....\$15
On filing application for Design (fourteen years)	.....\$30

SEARCHES OF THE RECORDS.

Having access to all the official records at Washington, pertaining to the sale and transfer of patents, MESSRS. MUNN & CO., are at all times ready to make examinations as to titles, ownership, or assignment of patents. Fees moderate.

ASSIGNMENTS OF PATENTS.

The assignment of patents, and agreements between patentees and manufacturers, carefully prepared and placed upon the records at the Patent Office. Address MUNN & CO., at the Scientific American Patent Agency, No. 37 Park Row, New York.

FOREIGN PATENTS.

Messrs. MUNN & CO., are very extensively engaged in the preparation and securing of patents in the various European countries. For the transaction of this business they have offices at Nos. 66 Chancery Lane London; 29 Boulevard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. They think they can safely say that THREE-FOURTHS of all the European Patents secured to American citizens are procured through their agency.

Inventors will do well to bear in mind that the English law does not limit the issue of patents to inventors. Any one can take out a patent there.

Pamphlets of information concerning the proper course to be pursued in obtaining patents in foreign countries through MUNN & CO.'s Agency, the requirements of different Government Patent Offices, &c., may be had, gratis, upon application at the principal office, No. 37 Park Row, New York, or any of the branch offices.

INVITATION TO INVENTORS.

Inventors who come to New York should not fail to pay a visit to the extensive offices of MUNN & CO. They will find a large collection of models (several hundred) of various inventions, which will afford them much interest. The whole establishment is one of great interest to inventors, and is undoubtedly the most spacious and best arranged in the world.

Communications and remittances by mail, and models by express (prepaid) should be addressed to MUNN & CO., No. 37 Park Row, New York.



C. A. C., of Ind.—Doubtless by advertising in the SCIENTIFIC AMERICAN you can procure the article you desire.

J. A. H., of Me.—Turbine, wheels have yielded 90 per cent of the whole power of the water; we have never known an overshoot wheel to yield 75 per cent. We see no reason why a turbine set near the upper end of an air-tight tube should not be as efficient as if set at the lower end, but though this plan has been tried it has not come into general use. Where large masses of solid float upon molten metal it cannot be from the same cause as the floating of a needle upon water.

J. C. A., of Mass.—If petroleum be subjected to sufficiently high temperature it will doubtless undergo destructive distillation, and be converted, in whole or in part into permanent gases. If the heat were great enough to convert it all into strictly permanent gases, we should suppose a large proportion would be marsh gas, and that the illuminating power of the oil would be diminished.

E. L., of N. J.—Any alcohol may be converted into vinegar by the quick process; vinegars retain the flavors of the grains or fruits from which they are made, but these flavors may be removed by filtering through charcoal. Prof. Everett, who has had a great deal of practice with the blow-pipe, says he likes the flame of a broad-wicked paraffine candle best of any; better even than that of an alcohol lamp. Magnetizing locomotive wheels has been tried on the New Jersey Central Railroad.

E. L. A., of Conn.—Probably the reason that your india-rubber would not dissolve in chloroform was that you tried vulcanized rubber.

E. G. F., of N. Y.—You can detect petroleum in springs with perfect ease and certainty by the smell.

H. C. E., of Mass.—To make 12 gallons of black ink, take 12 pounds of nutgalls, 5 pounds of green sulphate of iron, 5 pounds of gum senegal, and 12 gallons of water. Boil the nutgalls three hours, adding water for the evaporation; dissolve the gum in a little hot water and add it to the solution. See fuller directions on page 327, Vol. XI.

S. S. B., of N. Y.—You will shortly see an engraving of a steam carriage for common roads illustrated in the SCIENTIFIC AMERICAN.

A. D., of N. Y.—You will find a recipe for blue ink on page 250, last volume, SCIENTIFIC AMERICAN. We cannot publish the same thing over and over again.

J. F., of N. Y.—Address Solon Robinson, New York, for a work on farming.

A. H. Y., of Conn.—It is the common notion that the body of a drowned person may be raised to the surface by firing a cannon, but we never met with any evidence that there is any foundation for the opinion.

T. S., of Ky.—Cray hair may be dyed black by a preparation of nitrate of silver, or one of ammonia nitrate of silver. It would be better for you to buy the preparation of a druggist than to attempt to make it.

H. L. W., of Mass.—Find full directions for making transfer paper on page 341, Vol. XII., new series.

TO OUR READERS.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the patentee and date of patent, when known, and enclosing \$1 as fee for copying. We can also furnish a sketch of any patented machine issued since 1853, to accompany the claim, on receipt of \$2. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

INVARIABLE 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.

RECEIPTS.—When money is paid at the office for subscriptions, 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* acknowledgement of our receipt on their funds.

RATES OF ADVERTISING.

TWENTY-FIVE CENTS per line for each and every insertion, payable in advance. To enable all to understand how to calculate the amount they must send when they wish advertisements published we will explain that eight words average one line. Engravings will not be admitted into our advertising columns, and, as heretofore, the publishers reserve to themselves the right to reject any advertisement they may deem objectionable.

OFFICE OF ARMY CLOTHING AND EQUIPAGE, }
No. 29 BROADWAY, NEW YORK, July 3, 1865. }

ARMY SUPPLIES.—SEALED PROPOSALS WILL BE received at this office until 12 o'clock M., on Thursday, the 13th inst., for furnishing by contract, in such quantities, from time to time, as may be required for the use of this office and depot, until the 10th day of May, 1866, the following articles of stationery:—
Letter paper, white, ruled, first-class, 11 pounds to the ream.
Foolscap paper, white, ruled, first-class, 12 pounds to the ream.
Blotting paper, white, first-class, 100 pounds to the ream.
Folio post paper, white, ruled first class, 24 pounds to the ream.
Envelope paper, best quality.
Envelopes, straw color, No. 9, best quality.
Envelopes, white, No. 10, best quality.
Lead pencils, Faber's or Eagle, No. 2.
Steel-pens.
Pen-holders.
Seal wafers, boxes.
Sealing wax, best English small stick.
Black ink, quart bottles, Maynard & Noyes,
Arnold's Chemical Writing Fluid, quarts.
Black ink, quarts, copying.
Red ink, David's No. 3.
Inkstands.
Paper-folders.
Rulers.
Quills.
Office tape, best linen.
Memorandum Books.
Blank Books, cap ½ bound, 2, 3, 4, 5 and 6 quires.
Samples of the above articles can be seen, or further information with regard to the same can be received by application to this office. Proposals will be opened with their bids samples of the articles they propose to deliver.
Bonds will be required from the successful bidder for the faithful performance of the contract.
The United States reserves the right to reject any part or the whole of the bids, as may be deemed for the interest of the service. Proposals should be indorsed, "Proposals for Furnishing Stationery," and addressed to
Col. D. H. VINTON,
Dep'ty Q. M. Genl., U. S. A.

OFFICE OF ARMY CLOTHING AND EQUIPAGE, }
No. 29 BROADWAY, NEW YORK, July 3, 1865. }

ARMY SUPPLIES.—SEALED PROPOSALS WILL BE received at this office until 12 o'clock M., on Thursday, the 13th inst., for furnishing by contract, in such quantities and at such times, as may be required, at and for the use of this depot, until May 1, 1866, Furnace Coal and Red Ash Coal, Egg size.
Proposals must be accompanied by a proper guaranty for the faithful performance of a contract.
The United States reserves the right to reject all bids deemed objectionable.
Proposals should be indorsed, "Proposals for Furnishing Coal," and addressed to
Col. D. H. VINTON,
D. Q. M. Genl.

OFFICE OF ARMY CLOTHING AND EQUIPAGE, }
No. 29 BROADWAY, NEW YORK, July 3, 1865. }

ARMY SUPPLIES.—SEALED PROPOSALS WILL BE received at this office until 12 o'clock M., on Thursday, the 13th inst., for furnishing by contract, in such quantities, from time to time, as may be required, for the use of this depot until the 1st of May, 1866, the following articles:—
Nails, kegs, 104 and 12d.
Lamp oil, gallon, sperm.
Box chisels.
Box scrapers.
Wooden mallets, iron-bound,
Nail hammers.
Marking pots.
Marking brushes, assorted.
Trucks, Nos. 3 and 5.
Baling twine.
Bra's lanterns, for oil.
Corn brooms.
Further information can be had by applying at this office.
Bonds will be required of the successful bidder for the faithful performance of a contract.
The United States reserves the right to reject any part or the whole of a bid, as may be deemed necessary for the interest of the service.
Proposals will be indorsed, "Proposals for Furnishing Hardware," and addressed to
Col. D. H. VINTON,
D. Q. M. Genl. U. S. A.

BOILER INCRUSTATIONS.

Detroit, Jan. 24, 1865.
A. G. CROSS, Esq.—Dear Sir:—We have used your Anti-incrustation Powder in our locomotives during the past year, and find it to be all that is claimed for it, both in the removal of the old incrustation, and as a complete and effect preventive of the formation of any scale whatever, and I believe without injury to the iron. I have no hesitancy in recommending it to all who are using steam boilers, as the most perfect of all the compounds which I have yet seen for this purpose.
B. BRISCOE, M. M. D. & M. R. R.
A. G. CROSS, Detroit.

TO CAPITALISTS AND MANUFACTURERS.—THE undersigned, after years of intense application, has perfected a number of useful inventions, including a system of locks—one of them admirably adapted for mail locks; a steam motor, especially adapted for small powers; a magazine gun, very simple and compact; the most simple and durable clock yet introduced, etc. For particulars, or a home or foreign interest on most liberal terms, address
[*] SPENCER HATT, Cuba, Ind.

THE EIGHTEENTH ANNUAL EXHIBITION OF THE Maryland Institute of Baltimore, for the Mechanic Arts, will commence on Monday Evening, the 24th of October, and continue to Monday Evening, the 30th of October, 1865.
The hall will be open for the reception of goods on Monday, the 25th of September.
Goods for Competition and Premium must be deposited before Thursday Night, the 22nd of September.
Circulars, embracing details, may be had of the Actuary at the Institute.
Communications addressed to the undersigned, or Joseph Gibson, Actuary, will be promptly attended to. W. W. MAUGHLIN,
3 3m Chairman Committee on Exhibition.

A GREAT CHANCE FOR PROFITABLE INVESTMENT.—The State and County Rights of Gilbert's new Patent Coal and Ash Sifter, at great bargains. The cleanest, handsomest and most convenient coal and ash sifter in use. No dust.
R. BLAKE, No. 3 Tryon Row.

THE CELEBRATED KENTUCKY CIDER MILL.—Patented Nov. 24, 1863. State, County or Shon Rights for Sale. For particulars address the patentee, THEO. SHARP, Louisville, Ky.

WANTED—A PRACTICAL MANUFACTURING ELECTRICIAN. Address E. P. KENN, No. 36 Prospect street, Cleveland, Ohio.

IMPORTANT TO ENGINEERS AND MANUFACTURERS of Engineering Requisites.—Liberal arrangements offered parties to manufacture and introduce my Combined Safety Apparatus for Boilers. Illustrated June 24. The best arrangement yet. Address immediately, F. RIOR DAN, Care Munn & Co., Washington.

A RARE CHANCE.—HAVING OTHER BUSINESS to attend to, I would dispose of the entire right of my Revolving Double Cylinder Engine, illustrated on another page. This is a splendid opportunity to establish an extensive and profitable business by the manufacture and sale of these engines, or a fortune may be made in a short time by disposing of rights. Price, \$5,000. Address J. S. FOSTER, Box No. 153, Virginia, Nevada.

PLATINA—WHOLESALE AND RETAIL—FOR ALL purposes. H. M. RAYNOR, Importer, No. 748 Broadway, New York. Platinum Scrap of any sort purchased.

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FOR DANIELLS'S PLANING MACHINES, CAR MOR- TISING, Boring Machines, Car-Tenoning Machines, Car Planing and Beading Machines, Etc., address J. A. FAY & CO., Cincinnati, Ohio.

FOR WOODWORTH PATENT PLANING AND MATCHING MACHINES, Patent Siding and Resawing Machines, address J. A. FAY & CO., Cincinnati, Ohio.

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Patentees and Manufacturers of all kinds of PATENT WOOD-WORKING MACHINERY of the latest and most approved description, particularly designed for
Sash Blind and Door,
Wheel, Kelly and Spoke,
Navy Yards, Ship Yards, Railroad, Car and Agricultural Shops, Mills, Etc.
Warranted superior to any in use. Send for Circulars.
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Who are the only manufacturers of J. A. Fay & Co.'s Patent Wood-working Machinery in the United States.

FOR SALE—ENGINE BOILERS, SHAFTING, HANG- ERS, Pulleys, Rubber Machinery, Belting, Bolts, and Machinery of all descriptions, and Factories bought and sold, at DAVIS'S MACHINERY YARD, No. 122 and 124 Hudson street, one block from Jersey City Ferry, foot of Courtlandt street, N. Y.

STEAM GENERATORS AND ENGINES.—THE AMER- ICAN Safety Steam Engine Company are manufacturing Brayton's Patent Steam Generators and Engines. There is a saving of 25 per cent in fuel over ordinary engines and boilers and they cost but little to keep them in repair. There is no possibility of exploding the generators. For particulars and circular address GEO. WOODMAN, Treasurer and Agent, 84 Washington st. Boston

PARTIES DESIRING TO CONTRACT FOR THE manufacture of Wood and Iron Work, Agricultural Implements, or any article of machinery, can correspond with H. N. WINANS & BOSTWICK, R. E. Iron Works, Ithaca, N. Y.

PARTNER WANTED WITH \$10,000.—ANY PERSON who, for health or pleasure, desires to reside the whole or part of the year in a tropical climate will find this an opportunity such as is seldom met with. Address CUBA, SCIENTIFIC AMERICAN Office.

FOR SALE—THE PATENT RIGHT OF A DIFFER- ENTIAL Pulley Block, just issued, for raising heavy weights, whereby a great saving in time and labor is effected. Can be adapted for almost any purpose. For further particulars apply to THOMAS ALLEN, No. 192 Pearl street, or S. VAN HENCK, No. 77 ½ Washington street, N. Y., where model of machine can be seen.

WANTED—THE ADDRESS OF THE MANUFAC- Turer of "Steel Corn Mills" in use in the Southern States. Any one having the information will confer a favor by sending it to H. F. SMITH, Box 1,469, New York.

BOILER INCRUSTATIONS EFFECTUALLY PRE- vented by Winans' Powder, 10 years in use. No soda in it, consequently no foaming. H. N. WINANS, No. 11 Wall st.

PATENT PORTABLE MUSKETO BAR FOR TRAV- ELS, Tourists, Sportsmen, Hivng Bees and Fishing. A perfect safeguard against all annoying insects. Sent free of postage by remitting \$1.25. A liberal discount made for the trade. Also state Rights for sale. Address JOHN ZENGELER, P. O. Box 2,682, Chicago, Ill.

ANDREWS' PATENT OSCILLATING ENGINES.—A Double and Single Engines, from ½ to 125-horse power, finished at short notice. These engines leave the shop ready for use, require no special foundation, are compact, light and simple, and economical of power. For descriptive pamphlets and price list address the manufacturers, W. D. ANDREWS & BRO., No. 414 Water street, N. Y.

ANDREWS' PATENT CENTRIFUGAL PUMPS—CA- PACITY from 90 to 40,000 gallons per minute. For draining and irrigating lands, wrecking coffee dams, condensers, cotton, wool and starch, tanbark, paper, tanneries, and all places where a large and constant supply of water is required, these pumps are unequalled. They are compact, require little power, and are not liable to get out of order. For descriptive pamphlet address
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PORTABLE ENGINES, SUITABLE FOR THE OIL regions, from 8 to 20-horse power, with large fire-place, independent steam feed pump, steam gage, and improved water heater. The most complete and best engines in the market. For particulars address
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AGRICULTURAL AND MECHANICAL AGENCY, Havana.—EZRA K. DOD solicits consignments of and authority to contract for all articles of ready sale in the Cuban market, such as plows and other farm utensils adapted to cane culture, steam engines, boilers and mills, shovels, axes, saws, cane knives, gas fittings, brass and copper seamless pipes, cooking stoves for burning coke, animal coal for refining sugar, illuminating and lubricating oils, etc. Patents will be secured and introduced. References, New York—Messrs. Gebhard & Schuchardt, Moses Taylor and Thomas Downing; Philadelphia—Messrs. Merick & Sons; Baltimore—Messrs. G. DeFord & Bros. Boston—Thos. Oxnard, Esq.