Scientific American.

TO CORRESPONDENTS.

I. C., of N. Y.—The proposition you suggest to us, to publish a volume embracing engravings and descriptions of all the machines that have appeared in the Sci. Am. since its commencement, could not be carried out without a vast expenditure of money. In proportion to the vast number of engravings that have been published, we have but a small portion of them on hand; besides this objection, a work containing them all would be very large and

J.G., of Ind.—Iron is chilled by being cast in iron molds; the chilling is caused by the surface being rapidly cooled—made into hard steel; the outside of the mold must be kept cool with water. The person who sold you the receipt described for preventing scale in steam boilers, obtained it from our columns. The water of the Niagara river will yet no doubt be used very extensively

Robert Barber, of Bridgewater, N. J., wishes to obtain he address of Messrs. Sandford & Wakefield, who have

patents on corn planters.
S. B. W., of Mass—We are not aware of the existence of any journal in this country devoted to the interests of gas lighting. Mr. Barlow, of London, publishes a journal on gas lighting, which, we believe, is very good,

J. M., of Cal.—The information you want about tallow candles is scattered through various publications and canbe furnished as you want it. You had much better detail to us as briefly as possible the result of your experiments and we will examine and give our opinion in regard to the novelty of your process.

R. D. B., of Nova Scotia-The sketch of your alleged improvements in rotary steam engines has been carefully considered: we do not discover much novelty in it, and should consider an application for a patent as unwise. It does not possess, in our opinion, any advantages over other plans which have been abandoned as impracticable.

J. H., of Pa.—A pistol ball should penetrate further into plank at one-sixteenth of an inch distant than into one at twenty yards distant.

J. S., Jr., of Mass.—Blanchard's claim is a peculiar one. but it does not cover the copying of all forms of patterns, but it does if the pattern and article to be turned rotate e are of opinion you cannot get a machine equal to the Blanchard lathe for turning axe handles,

We have foreign patents belonging to the following persons, which they will please to order, directing us, at the same time, how we shall forward them :-

Ephraim Brown; J. W. Hoard; William Elliott; G.H.
Talbot: Caleb Winegar; L. W. Boynton; J. C. Day; A. E. Burnside, and Ferdinand Davidson.

G. P., of Montreal-We have no information ab Wilmot's apparatus in addition to what is published in the last Vol. of the Sci. Am. We have not heard that he has as yet done anything with it. We cannot answer your in-

quiry about cutting wood.

J.L., of Pa.—The Minie rifle loads at the muzzle: there is no peculiarity in the breech. Your subscription

A Subscriberinforms us that Grier's "Mechanics' Calculator" was published in 1843, by Sumner & Goodman, of Hartford, Ct. For sale by Blackie & Sons.

J. F. N., of N. C .- You will not be able to find a work nototton manufacturing which embraces the latest and best improvements employed in the business.

H. K., and Son, of Ohio—We cannot give you any information in addition to what is contained in the articles to which you refer. We would be very glad to do so if it

U. B. V., of Pa.—Your ideas in regard to ruling bank bills so as to prevent their alteration are new so far as we know, and appear to be very good. We do not think there is any chance, however, for a patent upon the sys-

S. S., of N. Y.-In the construction of journals you propose to dispense with the cotton waste, and employin stead a roller placed underneath the journal, and in con tact with it, for carrying up the oil. This device is not The same thing essentially has been presented to us on former occasions.

C. C., of Pa. -We have not much doubt of the novelty of your trip hammer improvement. Send us on a model

J. C. of Florida-A machine for turning wooden bowls was patented in 1850, by Addison Everett, of Middlefield, Mass., an engraving of which appeared in No. 52, Vol. 5, Sci. Am. We are unable to give you any information in respect to its operation or cost of the machine. We would advise you to address Mr. Everett on the subject.

J. S. McC., of Md.—We co not know of any situation that suits your wishes.

H. C., of N. Y., & T. J. L., of Pa.—If you will reter to the history of Propellers and Steam Navigation published in the Sci. Am. You will find illustrations of endless chain propellers. This invention is very ancient, and es no advantages in comparison with the plan in

P. D., of N. Y.—It would not be new to construct a mowing machine having two sets of knives cutting in opposite directions. We have seen machines having knives

operating in this manner.

F. F. G., of Texas—Short stroke engines are used in sav mills, &c., because they are compact, and givea quick direct rotary motion to the main shaft. The flues of a boiler should never be carried above the water line. The boiler, however, may be enclosed with brick as safely as withfelt. The most cautious engineers are sometimes guilty of neglect, and this may have been the case with the one to which you allude, who had charge of the exploded boiler.

H. S., of Va.—Ure's Dictionary of Arts will give you You can obtain a patent on the new article of manufacture, but not the process for making it, which is not new.

D. T. O., of N. Y.—The long pitman is subject to greater vibration than a short one, and is more liable to heat on that account. We cannot give you a rule for calculating the exact length of pitman in your case.

Y. N., of N. Y.—Every bullet in passing through a rifle barrel is feathered by the grooves, the barrel performing the office of a swedge. It might prevent the leading up of the grooves to swedge the bullets of breech-loading rifles. If cartridges are well made and greased, the barrel will be kept pretty well lubricated.

R. R. W., of Pa.—If the wheel had a throat and pas-

sage to allow all the water to flow through it freely, it would not move, the water would simply flow through it. Your wheel will be of the same power, whether large or small—the fall and quantity of water being the same. Your turbine having a six foot head, and openings having an area of 500 inches, will be about ten-horse power!

tion of the brake you refer to. By addressing the inventor in this city you can no doubt procure a descriptive cir cular.

Moneyreceived at the Scientific American Office account of Patent Office business for the week ending Saturday, Dec. 29, 1855 :-

W.P., of Ct., \$25; E. S., of N. Y., \$55; L, R., of N. Y., \$45; W. & G.B., of Pa., \$25; M. S., of W., \$30; H. & \$30; G. C. H., of Mass., \$25; J. B., of Pa., \$45; J. S. G., of N. Y., \$50; W. A. B., of Mich., \$35; W. H. B., of Pa. \$30; J. P. S., of Tex., \$60; M. F., of N. Y., \$32; A. F. W., of N. Y., \$25; A. F. & C. M. H. W., of N. Y., \$55; J. W., of Mich., \$27.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Dec. 29:—

C. H. W., of R. I.; R. W., of Ct.; W. P., of Ct.; E, H., of N. Y.; W. & G. B., of Pa.; J. S., of N. Y.; M. F., of L. I.; E. S., of N. Y.; J. P. S., of Tex.; J. McC., of Mich.; G. C. II., of Mass.; A. W., of Ill.; A. F. W., of L. I.; L. R., of N. Y.; G. & T., of N. J.

Important Items.

BACK NUMBERS AND VOLUMES-The following numbers and volumes of the Scientific American, are for sale at this office, at the annexed prices :- Volume VI Vol. VII, Vol. IX, and Vol. X, complete. Price, bound per Volume, \$2,75. Numbers in sheets, complete, \$2. Of Volumes IX. and X., we have also about 40 numberseach, not consecutive, which will be sent by mail on receipt of \$1.

RECEIPTS—When money is paid at the office for subscrip tion, 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 acknowledge ment of the receipt of their funds.

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 bind-

Literary Notices.

THE NORTH BRITISH REVIEW—This is one of that galaxy of foreign literature—the four Quarterlies—published by Leonard Scott & Co., No. 54 Gold street, this city. Its origin is due to the celebrated Dr. Chalmers, and is essentially the offspring of the Free Presbyterian Scott ish Church, but is not a religious Review, exclusively, like the "Princeton." It is comparatively a young Quarterly, beside the old Edinburgh, but it ranks perhaps the highest for decided ability. The number for this quarter, just issued, contains ten excellent articles. The first isonatory of the manufacturing population of Britain, and advocates the claims of a college in England something like that proposed in the State of New York, called the "Peoples" Ollege." It is an article which we commend to the attention of our manufacturers, machinists, engineers, &c. This Review has some very eminent contributors, such as Sir David Brewster, Sir Wm. Hamilton, Drs. Cummings, Chandlish, Hannah, and others of fame.

POSTAL REFORM—Its Urgent Necessity and Practicability: by Pliny Miles.—This is one of the most clear and emphatic exhibitions of the benefits of a cheap postalsystem that we have ever read. Mr. Miles tells us, among other facts, that, in 1835, before there was any reduction of postage either here or in England, the people of Great Britain wrote and sent through the post office \$2,000,000 and letters, and the people of the United States \$40,000,000, and in 1852 the correspondence of Great Britain, fostered by their cheap and uniform postage, and the system of free letter delivery, had increased to \$410,000,000 letters, while the number in the United States was only 102,000,000. During the period of 14 years, the population of this country increased 45 per cent. while that of Great Britain increased less than 5 per cent.; yet the increase of correspondence by mail in that country was, in round numbers, 400 per cent., while with us it was but 153 per cent. Stringer & Townsend, 222 Broadway, N. Y., publishers.

GREAT WORK ON THE ARCTIC REGIONS—Dr. Kane has been busily engaged since his return, in preparing a full account of his wonderful voyage to the Arctic Regions. Messrs. Childs & Peterson—the enterprising publishers.—Philadelphia, have the work in hand, and are sparing no expense to make it one of the most magnificent ever issued from the American press. It will be illustrated with twenty-five steel engavings, and a great number of beautiful woodcuts, representing scenes drawn by Dr. Kane on his expeditions. It will soon be issued at the love price of two dollars and a half per volume.

Puntam's Monthly—The January number of this sterling original magazine opens with an article on Will. Shakspeare and his Plays, in which the great dramatic poet is treated in a very pompous Johnsonian manner—without the Doctor's logic. A review of Prescott's "Philip the Second," is an able article. The editorial notes are excellent, and contain a fund of useful interesting matterrelating to an innumerable number of subjects. As a whole, this number is a good one to commence the new year, and gives evidence of great ability on the part of its contributors.

Terms of Advertising.

4	lines, for	each	insertion,			\$1
8			•	-		\$2
12	"		**			\$3
16	"		41			\$4

Advertisements exceeding 16 lines cannot be admitted, neither can engravings be inserted in the advertising col-

All advertisements must be paid for before insert-

WINVENTIONS WANTED—The subscriber wishes to purchase one or more new inventions in the housekenping or stationery line. Address, with full particulars, WILLIAM BURNET, Post Office, box 4,532, X. Y. City. 17 3*

THO THE MANY HUNDREDS OF PERSONS who, within the last few days have addressed to us

IMPORTANT TO INVENT-ORS.

PATHE UNDERSIGNED having had Ten years' in 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 Patents at home or abroad.

Over three thousand Letters Patent have been issued, whose papers were prepared at this Office, and on an average iffeen, or one-first of all the Patents issued each week areon cases which are prepared at our Agency.

An able corps of Engineers, Examiners, Draughtsmen, and Specification writers are in constant conjugate, which renders us able to prepare applications on the shortest notice, while the experience of a long practice, and facilities which few others possess, we are able to give the most correct counsels to Inventors in regard to the patentability of Inventions placed before us for examination.

Private consultations respecting the patentability of in-

give the most correct counsels 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 flees 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 patents present to inventors, they are informed that all inventions patented through our establishment, are noticed, at the propertime, in the Scientific Americans. This paper is read by not less than 100,000 persons every week, and enjoys a very wide spread and sub-tamila 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.

American and Foreign Patent Attornies, 128 Fulton street, New York; 32 Essex Strand, London; 29 Boulevard St. Martin, Paris; No. 3 Rue Thereienne, Brussels.

PNEUMATIC GOVERNOR for Stationary, Marine, or Locomotive Engines.—This regulator does not allow the engine to change first, and then correct it, as others also, and will save the cost in fuel in a few months. Safety Attachment—this is a perfect safeguard, as it will stop the engine instantly in case of accident. Adjustable Pulleys—will guide belts true to any angle. Regulating Valves—this is the best valve in use for the flyhall governor. Rights for sale. Address JOHN TREMPER No. 1 South Sixth street, Philadelphia.

DOCK DRILL—The American Rock Drill Co. in-the vite attention to their superior machines, adapted for all kins of rock work in quarries and mines, and espe-cially for artesian wells. They are simple in construc-tion, powerful and accurate in operation, and can be run by hand, steam, or horse power. An engraving and full description appeared in No. 15 of the Scientific Ameri-can. Apply to T. H. LEAVITT, Agent and Treasurer of the A. H. D. Co.

YOUNG MEN of small means can make over 100 per cent, at home or cary, assend, and honorable, Apply (inclosing a stamp) to Box No. 533, Detreit, Mich.

TO DRINGON: HAND CULTIVATOR, patented Ta. Feb. 20th, 1855, saves two-thirds the labor of cultivating carrots, onlons, drill-sown wheat, &c. Far particulars, and rights to nanufacture and se I, address J. A. ROBINSON, Fremon! N. H.

TECHNICAL DICTIONARY—In the English,
French, and German Languages; by Messrs. TOLHAUSEN & GARDISSAL, Civil Engineers. Ready
(first part.) French. English, German, price \$1.31; (second part) English. French. German, price \$1.31; (second part) English. French. German, price \$1.50. These
volumes are designed for the general use of Englineers,
Artists, Manufacturers, Foremen, Artizans, in short, of all
those who, in some way or other, are concerned in Arts
and Manufactures. The present work is the key through
which the foreign reader may penetrate into a language
which he may know but imperfectly; it is the instantaneous translator of the corresponding technical term, or
its equivalent, in the three great industrial languages.—
For sale at the Scientific American Office.

Wrought iron Under shot Water Wheels,—one 1s Myought iron Under-shot Water Wheels.—one 14 feet diameter and 3 feet wide; the other two about 12 feet diameter and 21.2 feet wide. Either can be made into breast or over-shot wheels at little expense. Terms moderate. Apply to E. WHITNET, New Haven, Ct. 15 6

ALLROAD SHUTTERS FOR STORES—An improvement in the above line was patented August 28th, 1856. Those wishing to use this improvement can be accommodated on reasonable terms by applying to the patentee and manufacturer, D. ROHAN, No.7 Jackson st., Cincinnati. Ohio.

-WOODWORTH'S PATENT Plan ing. Tonguing and Grooving Machines. The subscriber is constantly manufacturing, and darsowing sand darsowing real either best assertinent of these sunivalled machines to be found in the United States. Prices from NS6 to SIAS, Bights for sale in all the uncounted Towns in New York and Northern Prinneylvania, JOHN GIB. SON, Planing Mills, Albany, N. Y. 14 3m*

D. BARNETT, Malleable and Gray Iron Works Hamilton, corner McWhorter street, Newark, N Orders promptly attended to. 910*

CIRCULAR SAWS—We respectfully call the attention of manufacturers of lumber to the great improve ments recently introduced in the manufacturer of our Circular Saws. Being sole proprietors of Southwell's patent for grinding saws, we are enabled to grind circular saws from six inches to six feet with the greatest accuracy and precision. The impossibility of grinding a saw withoutleaving it uneven in thickness has always been acknowledged by practical saw makers. This causes the saw to expand as soon as it becomes slightly heated in work town without the saw in the saw loses its stiffness, and will not cut in a direct line. We will warrant our saws to be free from these defects: they are made perfectly even in thickness, or gradually increase in thickness from the edge to the center, as may be desired. As there are not thick or thin places, the friction on the surface of the saw is uniform, consequently it will remain stiff and true, and will require less set and less power. Will saw smooth save lumber, and will not be liable to become untrue. This is the oldest etablishment now in existence for the manufacture of circular saws in the United States, having been established in the year 1830. Orders received at our Warehouse, No. 48 Congress st., Boston. 12 3m*

CATATIONARY STEAM ENINES FOR SALE—Of Murizental Engines with iron bed frames, and Judsen's Patent Valves, good, strong, substantial, plain finish, ed., that will do good service, say from 4 horse power, \$215-0-30 horse power, \$1,037. Pumps, Rotlers, and faxtures can also be supplied when me eded. Address 2e3wtf S. C. HILLS, 12 Platt st., New York.

WELLS, & CO., Florence, Hampshire Co., Mass. will turnish to order, Morrison's Patent Shingle, Machines. This is the only machine extant that will rive with the grain of the wood, and produce perfect shaved and pointed shingles. The machine will work any kind of timber that can be worked by hand, and will make 25.000 shingles in 10 hours, regardless of width. with 4-horse power. Child's Circular Saw Mills constantly on hand.

ture to order, with the newest and most practical improvements, Surveyor's Compasses, Transits, Theodolites, &c., warranted to give satisfaction. Also Swiss drawing instruments. Catalogues gratis on application. AMSLER & WIRZ, 211 Chestuntst., Philadelphia.

JOSHUA GIBBS, of Canton, O. has invented a narchine for Grinding and Polishing plows. By addressing the patentee, a cut and directions for making and using will be forwarded; also the term of three months will be granted to test its utility and advantages. Cost for erecting the machine will not exceed \$15.

OH. SAVER—Save 75 per cent of your oil by using Devlan, Wood, & Hancock's Patent Oil Saver. For Devian, wood, a lancock statem on Savet. For particulars and right to use in machine shops, factories, &c., andon railroads, apply to S. C. HILLS, 12 Platt st., New York.

WAIL'S CELEBRATED PORTABLE STEAM Engines and Saw Mills, Bogardus' Horsepowers, 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.

VAIL & LIDGERWOOD,

13 1y* 9 Gold st., N. Y.

MPORTANT INVENTION—Patented August 14th, 1855. "Garratt's Metal "for Journal Boxes of allkinds, 1tis anti-friction, absorbs the oil, not liabile to break, it can be made cheaper than either brass or Babbitt metal, and after many long and severe tests, has been found to surpass all other metals ever used for the purpose, For the purchase of either State, county, or shop rights under this patent, apply to JOS. GARRATT, Senr., Madison, Indiana. 13 3m*

TO \$10,000—GREAT INVEST-int.— Any person desirous of investing a int.— or small amount in a patent right, that the profits of which will clear the whole cost in one month's sales. Can find an opportunity by addressing Box 2,627 this city.

ACHINISTS' TOOLS.—Meriden Machine Co the have on hand at their New York Office, 15 Gold street, a great variety of Machinist' Tools, Hand and Power! Punching Presses, Forcing Pumps, Machine Helt-ing, &c., all of the best quality. Factory West Meriden, Conn. 17 13*

P. N. FITZGERALD, Counsellor at Law-late Principal Examiner in the U. S. Patent Of-fice—has removed from Washington, D. C. to the city of New York, 271 Broadway (corner of Chamhers St.) As heretofore, his practice is confined to Patent Cases, which he will prosecute or defend, as counsel, tefore the Su-preme and Circuit Courts of the United States, also before the Patent Office, or the Judges having jurisdiction of sp-pals therefrom.

THREE GOOD JOURNALS FOR 1856!—Well adapted to all readers in every family. LIFE IL-LUSTRATED—a First-class Family Paper, devoted to News, Literature, Science, the A is, to Entertainment, Improvement, and Progress. Published weekly at \$2 a very.

year.
THE WATER.CURE JOURNAL—Hydropathy, its
Philosophy and Practice; Physiology, Anatomy, and the
Laws of Life and Health, \$1 a year.
THE PHRENOLOGICAL JOURNAL—Devoted to

all those Progressive measures for the Elevation and Improvement of Mankind. Illustrated. \$1 a year. For \$3 all three Papers will be sent a year. FOWLER AND WELLS, 308 Broadway, New York. Sample gratis, Agents wanted. Begin now! OIL! OIL! OIL: For railroads, steamers, and for machinery and burning—Pease's improved Machinery and Burning Oil will save fifty per cent., and will not gum. This oil possessesqualities vitally essential for lubricating and burning, and found in no other oil. It is of fered to the public upon the most reliable, thorough, and practical test. Our most skillful engineers and machinists pronounce it superior and cheaper than any other, and the only oil that is in all cases reliable and will not gum. The Scientific American, after several tests, pronounced it "superior to any other they have ever used for machinery." For sale only by the inventor and manufacturer.

N. B.—Reliable orders filled for any part of the United States and Europe.

CENTS A.YFAR—Or 16 months for \$1. THE PROBLEM YORK WEEKLY SUN is now sent to subscribers at the following very low rates, payable in advance —One copy, 3 months, 25 cts., 6 months, 50 cts.; 1 year, 75 cts., 16 months, \$1: 3 copies, 1 year, \$2: 8 copies, \$5: 315 copies, \$9: 25 copies \$15—with engravings.—The postage within the State is only 13 cents a year—out of the State 26 cents ayear. No traveling agents are employed. Specimen copies sent gratis. All letters should be post paid and directed to MOSES S. BEACH, 4

THE NEW YORK BAILY SUN—Is forwarded by the early mails to country subscribers at \$4 per annum or \$1 per quarter, payable in advance. The postage under the present law is as follows: to any post office in the State of New York. 78 cents per year, payable quarterly in advance. Out of New York State, but within the United States, \$1.56 per year, payable quarterly in advance.

MOSEN S. BEACH, Publisher, 4

Corner of Fulton and Nassau sts.

IMPORTANT TO ENGINEERS AND MACHIN-ISTS—NOTICE—Those wishing to obtain the genu-ine articles of Metallic Oil and Grease, should send their orders direct to the manufacturer. AUGUSTUS YOUK. MY, Office 67 Exchange Place, New York. No Agents employed.

ORCHOSS ROTARY PLANING MACHINE—
The Supreme Court of the U. S., at the Term of 1883 and 1854, having decided that the patent granted to Nich olas 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. Norcros'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*

RAIN 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.

DOWER PLANERS—Persons wanting Iron Planers of superior wormanship, and that always give satis faction, are recommended to the New Haven Manufactur ing Company, New Haven, Conn. 40tf

A NDREWS & 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. 23 ly

Paners, Engine and Hand Lathes, Drills, Molt Out-lers, 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 our giving full descrip-tion and prices, address, "New Haven Manufacturing Co." New Haven, Conn.

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

THE EUROPEAN MINING JOURNAL. RAIL-way and Commercial Gazette. A weekly newspa-per, forming a complete history of the Commercial and Scientific Progressor Minesand Railways, and a carefully collated Synopsis, with numerous Illustrations, of all New Inventions and Improvements in Mechanics and Civil Engineering. Office 26 Fleet street, London. Price \$6,60 per annum.