Scientific American.

TO CORRESPONDENTS.

they are said to be more durable. Red lead is the best paint for such roofs, It is easier to put on a lock roof, with white lead in the seams, than to put on a soldered roof. The pitch should not be less than an inch to the foot. In Iowa a tin roof may last for ten or twenty years out paint, but in New York, subjectto sea breezes, it : would last but about three years, We do not know the character of the heater mentioned by you.

J. W., of Ohio-If you dissolve some shreds of india rubber in warm turpentine, it will answer as a cementto make india rubber adhere to wood. There is no cemen that can make wood and glass adhere permanently to gether

C. W., of Ohio - Pencils are pressed in diesto give them a fine finish. E. M. B., of Pa.-Engravers use a comm to draw designs on wood ; they first rub alittle chalk and moisture, or fine white pumice, on the block, to form a white ground; " Chambers' Information for the People,"

gives an account of wood engraving. M. D. P., of N. Y.-We do not know where you could get a one-horse power engine to work your sixteen inch crank. We never would use an engine having such a

small bore. There can be no doubt but a one horse power is equal to that of five men working on the same crank as the engine, but a one-horse engine involves more friction than a four horse power, in proportion to their size E., of Va.-A paddle wheel to revolve and measure the

rate of a vessel's sailing, would not be patentable by be-ing merely connected with a rovolving indicator; all steamships have such indicators moved by the revolu tions of the mainshaft. They do not give the amount o slip, but the number of revolutions multiplied into the circumference of the wheel, gives the vessel's speed, a lowing for slip.

J.C.S., of Ohio-No such molasses as those described by you could be sold in this city. There are various ways of purifying molasses, but it requires expensive apparatus to do this on a large scale. If you stir an ounce of fresh slacked lime into every gallon of molasses, pour in some boiling water, and then, after standing half an hour, filter them through a cloth, you will find the taste much improved.

A. F., of Ill.-The small screw of two inches is just a powerful as one of twelve inches. There is no power in the screws themselves, so the dispute about the difference of power among your mechanics has been a waste of words. The power is the force applied to operate them The power required to work each screw will just be in proportion to the area of the blades or thread, and the velocity given to them.

A. H., of N. Y .- Yours will be attended to next week. G. M., of Ill.-You are mistaken in regard to the action of electricity. You may depend upon it that those houses having conductors and yet were struck with the electric fluid had defective conductors. A glass knob on the point of a conductor will destroy its utility.

J. B. B., of Lake Superior-A propeller balloon is not new to us. Capt. Taggart made a number of ascents with one about six years ago, and on one occasion we saw him come near losing his life. Carbonic acid is too sensitive to heat and cold to be used for inflating balloons. If you can dress lumber as cheap as you have stated, capitalists, no doubt, could be found by you to engage in the business. The ventilating chimney-cap you describe is il-lustratedon page 160, Vol. 9, Scr. Am., but we have been told it will not cure a smoky chimney overtopped by an

adjacent building. J. A. R., of N. Y.—The mastic cement used for the out side of houses in this region is composed of dry sand, a little plaster of Paris, and marble dust, slightly moistened with boiled linseed oil; the bricks to receive it are first coated with boiled oil.

J. F. S., of Iowa.-All reeds yield fibrous materials ca pable of being made into paper, rope, &c. Blake's fire-proof paint is very good for the roofs of houses. Pitch, tar, and sand, mixed together, makes a good cheap roofing composition. You must apply it hot, then cover its entire surface with sand and fine gravel.

C. H. I., of Mass.—The suggestion you offer in regard to checksformoney paid to conductors, is a good one we think, but it could not be considered as a patentable nov elty.

W W. B . of Wis,-Yours has been received.

S. B., of N. Y.—The water engine described by you could not be patented. You will find one similar to it illustrated in Vol. 3, Sci. Am. There are quite a number of water pressure engines in operation in various parts of W. M. B., of Mo.-The scales of fish perform no office

in their propulsion, so far as we know; we cannot con-ceive how each scale acts as an oar; we are sure this cannot be so with the scaleless finny tribes.

M. H., of _____Gum arabic will impart a fine loss to water colors. The enamel on Chinese ware is burned on in a kiln.

S. Oppenheimer of Peru, Ind., wishes to purchas chine capable of splitting barrel hoops, particularly out of ash timber.

Moneyreceived at the SCIENTIFIC AMERICAN Office on account of Patent Office business for the week ending

E. L. B., of N. Y., \$30; T. B., of N. Y., \$100; W. E. Jr., of Ill., \$15; A. D. B., of Ga, \$30; J. P., of N. Y., \$55; C. H. B., of Conn., \$30; A. G., of Ind., \$35; W. H., of O., \$25; W. & U., of O., \$55; D. & McN., of N. Y., \$30; E. J. A., of Vt., \$30 : C. P. C., of Mass., \$30 : T. M., of N. Y. \$35; R. F. G., of Ill., \$25; J. H. C., of Pa., \$25; E. H., of W. Y., \$25; C. & H., of R. I., \$220; O. D., of Md., \$20; W. H., of Pa., \$30; W. I., of N. Y., \$30; P. L. & B., of N. Y., \$400; F. C. G., of N. J., \$20; N. N., of Ill., \$22; S. L, of Ill., \$25; E, A., of N. Y., \$25; J. F. T., of S. C., \$32; J. L. G., of Ga., \$20; M. O. C., of C. W., \$30; W. C., of N. Y., \$25; J. G. S., of N. Y., \$75; A. B., of Conn., \$25; R. G., Jr., of Mass., \$55; P. H. Van A., of N. J., \$25; A. D., of N. Y., \$55.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, April 12:-

J. S. J., of Pa.; W. H, of O.; W. C., of N. Y.; W. S., of N. Y.; C.W. Jr., of N. Y.; E.A., of N.Y.; J.G.H., of N. J.; (3 cases); N. N., of III.; S. L., of III.; S. H. & M. C. W., of Pa.; W.D. U., of N. C.; R. F. G., of III.; J. H. C., of Pa.; C. M. L., of N. H.; E. H., of N. Y.; A. B., of Conn.; R. G., Jr., of Mass.; P. H. Van A., of N. J.; A. D. of N.Y.

Important Items

H.C. C. of Iowa.-We like the soldered tin roofs best : BACK NUMBERS VOLUME XI-We are no longer able to supply complete sets of the present volume. The num bers which are entirely exhausted are 6, 12, 14, 15, 17, and 19. Any other numbers up to the present we are able to supply to any who may wish them. Those who order the back numbers from the commencement of the volume will receive such as we have, and their subscription will be entered up enough longer to com-

pensate for the numbers which we are unable to supply RECEIPTS-When money is paid at the office for subscription, a receipt for it will always be given ; but when sub-scribers remit their money by mail, they may consider the arrival of the first paper a bona fide acknowledg ment of the receipt of their funds.

						4				
Terms of Advertising.										
	4	lines	for each	insert	ion,					\$1
	8		**							\$2
	12	•								\$3
	16	**		•						\$4
	1				10.1					

Advertisements exceeding 16 lines cannot be admitted neither can engravings be inserted in the advertising columns at an y price, C All advertisements must be paid for before insert

ing. **IMPORTANT TO INVENT-**

IMPORTANT TO INVENT-ORS. THE UNDERSIGNED having had TEX years' and foreign countries, beg to give notice that they con-tinue to other their services to all who may desire to se-cure Patients at home or abroad. Wore three thousand Letters Patent have been issued, whose papers were prepared at this Office, and on an average *ifteen*, or one-third of all the Patents issued each week, are on cases which are prepared at our Agency. An able corps of Engineers, Examiners, Draughtsmen, and Specification writers are in constant employment, which renders us able to prepare allow on the shortest notice, while the experience of a long practice, and facilities which few others posses, we are able to give the most correct counsels to inventors in regard to the patenta bility of inventions placed before us for ex-amination.

give the most correct counsels to inventors in regard to the patenta bility of inventions placed before us for ex-amination. Private consultations respecting the patentability of in-ventions 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 improve-ment should be first forwarded, which we will examine a nd give am opinion as to patentability, without charge. Models and fees can be sent with safety from any part of the country by express. In this respect New York is more accessible than any other city in our country. Circulars of information will be sent free of postage to any one wishing to learn the preliminary steps towards making an application. In addition to the advantages which thelong experience and great success of our firm in obtaining patents present to inventors, they are informed that all inventions pat-er time, in the SCIENTIFIC AMERICAN. This paper is read by not less than 100,000 presons every week, and en-joya a very wide spread and substantial influence. Most of the patents obtained by Americans in foreign countries are secured through us, while it is well known that a very large proportion of all the patents applied for in the U. S., go through our agency. MUNN & CO. American and Foreign Patent Attornies, 128 Fulton street, New York, 32 Essex Strand, London ; 29 Boule-vard St. Martin, Paris i No. 3 Rue There Sentenc, Brussels.

Pard St. Jahrin, Janes A. C. Three Cylinder Boilers, 44 Dinches diameter, 30 feet long, with two 13-inch flues each, with steam drums 30 inches diameter and 5 feet high; and Cross Boiler 36 inches diameter and 12 feet long; safety and check valves all in complete working order. Also, a new set of Van Sickle's Patent Salaman-der GrateBars for a Furnace, 5 feet by 10. Apply to HECKER & BROTHER, 324* 267 Cherryst., New York.

PAGES PATENT PERPETUAL LIME KILN, will burn 100 bbls. lime with three cords of wood, every 24 hours, likewise my coal kin will burn 150 bush-el with 1 tun bituminous coal in the same time; coal is not mixed with limestone. Rights for sale. 324 C. D. PAGE, Rochester, N.Y.

UNITION STATES PATENT REVOLVING Mea-sure.—Inventor and manufacturer, Louis Young. The following assortment will soon be offered to the pub-lic ...4 wheel, length 25 to 50 feet; 6 wheel, 50 to 500 ft; 12 wheel, lou to 1000. Surveyor's or Mile Measure; 10 link wheel, lengthone mile or more. The patentee is willing to dispose of part of the patent. For particulars apply to SAMUEL COLMAN, 6 Wall st.

MACHINIST'S' TOOLS — Meriden Machine Co 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 Belt-ing, &c., all of the best quality. Factory West Meriden Conn. 22 13*

32 13* OCOMOTIVE WOOD-Winter's American Wood I Sawyer is particularly adapted for cutting wood for locomotive wood, is capable of cutting 75 to 100 cords in a day. Patented 1854. State and road rights for sale; for particulars address WM. WINTER, Kondout, N. Y. 32 4*

SMUT MACHINES—A. NEWBURY & CO., of Windham Center, N. Y., are manufacturing a supe-rior article; having been thoroughly tested for a number of years; hey are found inferior to none in cheapness, du-rability, and in the quality of their work. Price \$50. 324* of years, rability, 324*

A STEAM WOOLEN FACTORY, and Four Lots, situateon Chestnut street and the Canal—Fac-tory of Brick, 40x50 feet—three stories high and an attic -with two set of first rate eastern machinery and two custom carding machines; engine and Dye House 40x50 feet, two stories high, together withother out-houses. Ap-ply to H. CULLUM, Meadville, Pa. 1

AUTION—The public are hereby cautioned against /purchasing any rightfor improvement in Horse Shoes, attented 26th of July, 1854 by W. H. Towers, from Geo. Earle or E. B. Strong, as the power of attorney under hich such sales may be attempted to be made was re-kedsome months since. W. H. TOWERS, 204 32 4

ARRISON'S GRIST MILLS-20, 30, 36 and 48 inches diameter, at \$100, \$200, \$200, \$200, and \$400, with all the modern improvements; Bolters, Elevators, Belt-ing, &c. &c. Also, Portable and Stationary Steam En-gines of all sizes, suitable for said Mills. Apply to 32 cowtr S. C. HILLS, 12 Plattst., N. Y.

BIRMINGHAM IRON FOUNDRY-Manufactur-ars of Iron and Composition Castings, Chilled Rolls, Mill Greating, Fan Blowers, Trip Hammers, Shafting, Shnare, Prassers, &c. & chila Rubber Calenders, Grind-ing and Cutting Machines, Turbine and Centervent Wat-er Wheels. Also, contractors for Breast and Overshot Wood Wheels. Address SHELDON BASSETT, Prest., Birmingham. Conn. 32 60w

WERTICAL STEAM ENGINE and Boiler for Sale at a bargain. The Engine is nearly new, and well finished. The cylinder is 9 inches; the fly wheel is a band wheel 5 feet in diameter, face 14 inches, turned off, weight 1350 lbs. The boiler is 20 feet long, 42 inches in diameter, 1 flue 17 inches, well braced wrought-iron heads; it is very strong, and has been in use about six months; is about 15-horse power. Cost \$1200, will be sold for \$675 cash; delivered on ship board. Apply to MUNN & CO., atthisoffice.

TO MANUFACTURERS.—For Sale or to Lease. 1 purposes, on the orth bank of the Passaic, on the line of the New Jersey Rairoad, about one mile and a half from Newark, and near the East Newark Station, lying be-tween the cities of New York and Newark, offering fa-cilities for water, railroad and good turnpike communi-cation, with both, at all seasons. This location is admira-bly adapted for manufacturing purposes, particulary where inucly space is needed. For particulars apply to S J. (if STIN, 10 Center st., Newark; or to J.M.; S M. THORBURN & CO., 15 John st., New York. 31.2*

HOWARD'S IMPROVED DREDGING MA-chines for working in a sea way. Warranted to do HOWARD'S IMPROVED DREDGING MA-well in a heavy sea; calculated both to excavate and dispose of the earth, without the assistance of lighters or extra hands Also, dredges with machinery and hull arranged to suit all situations where excevations may be required; either with or without lighters, all manufac-tured at the Franklin Foundry, Albany, N. Y. For offi-cial account of the capacity of these dredees, see Capt. Webster's Report at Chicago, Ill.: Lieut. Meade's at Whitehall, N. Y., and Col. Trumbull's at Erie and Oswe-go, N. Y., on Dredges built for the U. S. Government No. 30, Vol. 10, Sourstryto American No. 1, Vol. Journal of the Franklin Institute, and No. 151, Vol. 35, of the Artisan London. For further particulars apply to D. S. HOWARD, now at Corpus Christi, Texas, but, A. LOW, at the Franklin Foundry, Albany, N.Y. 31 2*

AMES HARRISON, Jr.'s MANUE ACTORY Second Avenue. corner of 22nd st., New York. 31

test Patent. A supply constantly on hand. Price 8200. Address New Haven Manufacturing Co., New Haven, Conn.

TIB'S AND OTHER Superior Manufacture, Lan-Cashire and Sheffield Files, Dixon's Black Lead Crucibles, Brass and Iron Machine, and Cap Screws, Pattern Letters, from 3.16to 2 inches, adapted to all de-scriptions of Casting. Stub's Plyers and Nippers : small Bench Vises; Emery Cloth and Emery Paper : mate-rials for Locksmiths and Bell Mangers; Brass and Iron Gimlet Pointed Screws of all sizes, &c. &c. MANY, BALDWIN & MANY, Importers and Dealers in Build ing Hardware, &c., 49 John st., cor. Dutch, N.Y. 314*

ing Hardware, &c., 49 John st., cor. Dutch, N. Y. 314* WM. BURDON'S STEAM ENGINE WORKS. 102 Front street, Brooklyn, N. Y.-Engines from 3 to 40 horse power constantly kept on hand, of the latest styles and patterns, with all the modern improvements. Enginesfrom 40 to 200 horse power made to order, high pressure or with condensers. Also portable engines with hoilers, and engines attached with wheels for pile-driving and wood-sawing, circular saw mills, upright engines that take up a very smallspace for printers' and pumping en-gines, steam pumps of various sizes, rotary pumps and mining pumps i. also quartz mills and stampers for copper and gold, improved hoisting machinery for mines or stone quarries: also sugar machinery, sugar mills, sugar kettles and vacuum pans, saw mills, grist mills, marble mills, rice mills, screw and hydraulic presses, boilers, and castings of every description. The reputation that Wm. Burdon has sustained for the last 20 years, as an engine builder, is a guaranteefor his work. Miners and manufacturers will hand. With the large lo of boilers, shafting, pulleys and hangers kept on hand, orders can be shipped the same day they are received. Also a large number of second hand engines of various sizes for sale. Second hand en-gines tought or exchanged for new ones or vold on com-mission. The great facilities and perfectsystem and order carried on in this establishment, enables Mr. Burdon to sell lower than any other establishment in the country for the same matorial and labor. Advice given gratis, drawings and plans made at the shortestnotice. 30 4*

W OODWORTH PATENT Planing. Tonguin⁶ and Grooving Machines-The subscriber is con-stantly manufacturing and has now for sale the best as-sortment of these unrivalled machines to be found in the United States. Prices from \$35 to \$1450. Rightsfor sale in all the unoccupied towns in New York and Northern Pennsylvania. JOHN GIBSON, Albany Planing Mill, Albany, N. Y. 30 12* Albany, N. Y.

H. BAR'ILETT'S HOT AIR FURNACE Now ready, and for sale at the foundry of John-son. Cox, Cameron & Co., Spuyten Duyvil, N.Y. This furnace exceeds in power and economy any ever hereto-fore offered to the public. All orders should be directed to the patentee, Spuyten Duyvil, N.Y. An engraving and description of this really valuable furnace was given in Sot. Am., Vol. X. No. 39. 30 3*

18.56 - WOODWORTH'S PATENT Pla-ning, Tongueing and Grooving Ma-chines.—The subscriber is constantly manufacturing, and has now for sale the best assortment of these unrivalled machines to be found in the United States. Pricesfrom \$85 to \$1450. Rights for sale in all the unoccupied Towns in New York and Northern Pennsylvania, JOHN GIB-SON, Planing Mills, Albany, N. Y. 30 3m*

LL PERSONS ARE CAU'MONED against re-cognizing, in negotiations with Silas G. Randall, of thisplace (now East.) a certain power of attorney given by me to him about a year and a half ago, as said power has been demanded, and isnow retained against my wish. J. HERVA JONES. 30 3* Rockland, Ill., March, 1356.

DRAWING INSTRUMENTS—1'he largest stock in the country, comprising our well-known German silver Swissinstruments, and German, French, and others Surveying and engineering instruments, warranted of the best construction and quality. Catalogues gratis. ANSLER & WIRZ, 26 6eow* 211 Chestnut st., Phila., Pa.

ENGINEERING.—The undersigned is propared to detail of steamahips, steamboats, propellers, high and low pressure engines, bollers and machinery of every descript tion, Broker in steam vessel, machinery, bollers, &c. General Agent for Ashroft's Steamand Yacuum Gauges Allen & Noyes' Metallic Self-adjusting Conical Facking, Faber's Water Guage, Sewell's Salinometers, Dudgeon's Hydraulic Lifting Press, Reebling's Patent Wire Ropefor hoisting and steering purposes, Machinery to of the most approved kind, etc. HARLES, W. COPELAND, CHARLES, W. COPELAND,

CHARLES W. COPELAND, Consulting Engineer, 64 Broadw

A RTIFICIAL LEGS—Palmer's Patent—Manufac-A tured at 378 Broadway, New York, Springfield, Mass., and 376 Chestnut st., Philadelphia, by PAI.MFR & Co.-These legs are universally regarded, and recommended, as an invaluable boon to all who have suffered mutilation by amputation, by all of the first surgeons in Europe and America: by all the Institutes for the promotion of Arts, and by the several thousands of persons now blest with them in their daily use. Pamphlets containing the most reliable information are sent gratis to all who apply for them. 26 6 eow*

CIRCULAR SAWS-We respectfully call the atten the of manufacturers of lumber to the great improve-ments recently introduced in the manufacture of our patent for grindingsaws, we are enabled to grind circular patent for grindingsaws, we are enabled to grind circular patent for grindingsaws, we are enabled to grind circular patent for grindingsaws, we are enabled to grind circular patent for grindingsaws, we are enabled to grind circular patent for grindingsaws, we are enabled to grind circular patent for grinding as any with out leaving it uneven in thickness has always been ac-knowledged by practical saw makers. This causes the saw to expand as soon as it becomes slightly heated in work-ing. When this takes place 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 no thick or thin places, the friction on the surface of the saw is uniform, consequently it will remain stiff and true, and will require los quad less power. Will saw smooth, save lumer, and will not be liable to become un-true. 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 re-ceived at our Warehouse, No. 48 Congruss st, Roaton. 12 Gm*

HENCK MACHINERY DEPOT-163 Green-wich street, New York keeps always on hand Lathes, Planers, Drills, Steam Engines, Woodworth's Patent Planing Machines, Belting, &c., in great Variety, Tools furnished of any size, to order, and of the best quality. 20 8 A.L. ACKERMAN, Proprietor.

WAIL'S CELEBRATED PORTABLE: STEAM Ingines and Saw Mills, Borardus' Horsepowers, Saw Gummers, Ratchet Drills, &c. Orders for light and heavy forging and castings executed with dispatch. LOGAN & LIDGERWOOD. 13 1y* 9 Gold st., N.Y.

Grooving Machines-Double machines plane both sides, tongue, and groove at one and the same time, sav-ing one half of the time when lumber is required to be planed on both sides. Large assortment constantly on hand. Also steam engines and boilers of the best quality. Warranted to give entire satisfaction to purchasers. 25 8* 57 Pearl st., Brooklyn. L, I.

WELLS & OO., Florence, Hampshire Co., press Mass.-Manufacturers of double and single patent premium Circular Saw Mills, of various capacities and styles, unsurpassed in point of Finish, Durability, and Uility. Morrison's Patent Shingle Machines, which rive, shave, and joint perfectly, 60 shingles per minute.-Self Setting, Shingle, and Lath Sawing machines. Car-penter's Patent Rotary Force Pumps, admitted the best in the United States. Saw Mandrels, Sets and Set Punch-es, Mill Gearing, Shafting, &c. Orders by mail will re-ceive prompt attention, and Cut, Circulars and Frice Listsfurnished when deisred.

CARPENTER'S ROTARY PUMP-For Pump-ing Hot or Cold Water, Lard Oil, &c. is (see good no-tice on both sides, in this paper, No. 29.) manufactured and for sale by D. C. HENDERSON, Sandusky, Ohio. 315*

L. ARCH AMBAULT, Portable Steam engine Builder, löth and Hamilton st., Philadelphia.—Saw Mill Bugines on Wheels from 10 to 30 horse power. Also Hoisting, Pumping, and Pile driving Engines, from 3 to 30 horse power. 25 8*

Misse power.
Will: AMERICAN PLATE GLASS CO. Having erected extensive works in Fast Brooklyn, (foot of North Sixth st.) are now prepared to execute promptly all orders forwarded to them, for Reugh Plate Glass, for Sky Lights, Floor Lights, Pavements, Deck Lightsior vessels, &c. Also an entirely new article possessing the properties and beauties of Agate, called Chalcedon. This material supersedes Marble, in its superior quality and utility for the purpose of Plooring, Mantel Pleces, Table Tops, and Ornamental Architecture. All orders left at the Office 430 Urnadmut All receive prompt attention. Office 430 Broodway. Rough Plate Glass in the Sheet at the factory, 1-4 in.3%c.; 3-4 in. 3%c.; 1-2 in.40c.; 5.8 in.60c.; 3-4 in. 75c.; 7-6 in.80,; 1 in. 836c.; 11.4 in.\$123. Terms cash in 30 days.

BotLER INCRUSTATIONS—No scale will form Preventor is used. At the same time the appartus is the best fleater that can be obtained. Apply to 4. W. SAIt-GENT, Delimonico's blotel. New York (ity. 2512*

The second secon

LINEN MACHINERY-JOHN R. McNALLY Champlain, N. Y. Agent forthe sale of linen ma-chinery of every description, new and second hand. En-gineers and machinists tools, and linen yarns of every number and quality. 22 13*

PATENT ALARM WINSTLE-For Speaking Pipes. The right of a limited number of the Southern States, of this valuable patent, for sale on reasonable terms. Apply to W. OSTRANDER, No. 57 Ann street, N. Y. 29 13

TEAM PUMPS AND FIRE ENGINES-Steam Pumping Engines for wrecking purpases. Irritating and Draining Lands, Deep Mining Shar's, Quaries, and Excavations, Railroad Stations, Factories, Public Institu-tions, Hotels, Gas Works, Steamers, &c. Also a large and improved class of Pumping Engines for supplying Cities, Towns, and Villages. Apply to 11. R. WORTHINGTON, 28 Broadway, New York City. 25 13*

Dioaway, Awa Tork Criv. 20 13* Orderway, Awa Tork Criv. 20 13* Orderway, Awa Tork Criv. 20 13* Orderway, Award Stranger, and Stranger, Award Stranger, Award Stranger, 20 10 gum. Thisoil possesses qualities vitally essential for lubri-cating and burning, and found in no other oil. It is of fored to the public upon the track: toliavio, thorough, and practical test. Our most skilling length and other oil. It is of 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 machin-ery." FS. PEASE, 61 Main st., Buffalo, N. Y. N. B.-Reliable orders filled for any part of the United States and Burope.

NORCROSS ROTARY PLANING MACHINE The Supreme Court of the U. S., at the Term of 1853 and 1854, having decided that the patent granted to Nich olas G. Norcross, of date Feb. 12, 1309, for a Rotary Pla ning Machine for Planing Boards and Planks 1 inot an infringement of the Woodworth Patent. Eights to use the N. G. Norcress'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. Roston. 27 State street, and Lowell, Mass. 125m*

Boston, 27 State street, and Lowell, Mass, - 19**6m***

VEW HAVEN MFG. CO.—Machinists' Tools, Iron Planers, Engine and Hand Lathes, Drills, Bolt Cut-ters, Gear Cutters, Chucks, &c.. on hand and finishing. These Tools are of superior quality, and are for sale low for cash or approved paper. For cuts giving full descrip-tion and prices, address, "New Haven Manufacturing Co. New Haven, Conn. 19 tf

A GENCY FOR THE PURCHASE AND SALE of valuable patents and inventions, T. H. LEAVITT, No. 1 Phenix Buildings, Boston. None but matters of real merit and utility will receive any attention. Circu-larscontaining further information may be had on appli-cation. 29 12*

Ö

© 1856 SCIENTIFIC AMERICAN, INC

255