# Scientific American.

## TO CORRESPONDENTS.

R. J. S., Jr., of N. C .- Your plan of capturing Sebasto pol, by discharging bomb shells filled with camphene upon the doomed city, may be very good. And it may be, as you eloquently remark, that "The proud castles of Inkermann, which the Russian Autocrat has boasted was impregnable, could be taken in one day." Perhapsalso, as you further state, "the proudest navy that ever spread its canvas pinions to the joyous breeze, whose sturdy sides bristled with threatening cannon, would melt at the magic touch of this wondrous agent like the unreal fancies of a sleeping brainat the waking moment of a mighty wind !!? We are pleased to know that in your mind there is '' no shadow of a doubt '' as to the success of this invention. We would suggest that you communicate with H. B. M. Queen Victoria, and H. I. M. Napoleon III., of France, so that the present European war may at once be brought to a termination. Patents for such gigantic inventions are unnecessary. No government would hesitate to pay a suitable reward for the bare idea. We ould further suggest that instead of only firing bombs filled with camphene, you make an improvement in the shape of a machine for spouting the camphene in a continuous stream upon the town. If a lighted candle were held near the nozzle, the camphene would ignite as it issued, and thus a steady volume of liquid fire might be poured in upon the town, which would insure its instant destruction without the firing of a gun. If the besieged city were difficult of near approach, a hose pipe might be quietly laid, under cover of the night, up to the very walls, and a murderous deluge be suddenly commenced. This apparatus could also be used on shipboard. A method of capturing whales, substantially the same as yours, has long been in use ; we do not sufficiently understand your plow improvement to judge of its patentability.

J. A. R.. of Mass .- Your device for opening and closing window shutters does not present any novel feature that we can discover; we have seen the same thing in operation on window shutters in this city, and several applications have been made for paterisfor it within the past five years.

W. P. H., of Pa.-Your ideas in regard to ascending in clines on railroads, and turning curves, do not present any thing new or patentable ; we have long been familiar with the essential characteristics embraced in each, and we can not advise you to waste your time upon them.

J. D., of Chio-You will oblige us by distributing theex tra SCIENTIFIC AMERICANS among those who would be like ly to wish such a paper. The sketch of your alleged im-provement in water engines presents novelty, and we should think a patent might be secured for it, but we cannot think it capable of operating as well as a water wheel under the same conditions, and as the apparatus is more expensive and more liable to derangement, we cannot advise you to do anything with it.

J. M. W., of Mich.-We shall need drawings if you want an opinion as to the patentability of your invention ; a model would be still better. What advantages do you expect to realize?

N. B., of Me .- The principle involved in your stove is not new. The arrangement appears novel to us and could perhaps be patented.

J. S. E., of Md.-We have not the numbers you speak of. You have not given the depth of the ditches, how then can we tell the quantity of water; if you know the quantity of water that gathers in a given time, say 10 cubic feet in a minute, or whatever it may be, you can easily calculate the depth and width of the witch, also the fall—the latter re-

quires to be very small. E. A. H., of Ill.-You: .-Yours expired with No. 15. The di rection of A. O. Hill's paper has been changed; there was no direction sent with his subscription. Have you put the coking apparatus in practice? we do not see how it can coke the coal if the blast is driven through it, it will produce complete combustion.

W. S. M., of Ill.-Your harrow-teeth corn sheller is new so far, as we know, but we really do not see its advantages

place of residence, we should have written in answer to your letter about the new material for making paper, of which you furnish a sample. There is no way by which you can protect yourself in the exclusive product of the article : like cotton, it is a natural plant, and all are free to cultivate it.

J. L., of Mass.-The lock which you describe for sliding doors appears to us to be new, and we think a patent may be obtained for it. You had better send us a model for examination.

H. C. L., of Ga.-Overman's Metallurgy, is the book you want E. L. P., of Mass .- You cannot be interrupted in the use

of your machine, in view of the facts set forth, and we presume no attempt will be made.

J. D. M., of Ala .- The ideas you suggest in regard to vertical boilers cannot be considered as possessing any nov-el features. In Boone's boiler the same ideas are carriedinto effect.

J. M., of N. J.-Send us a sketch of your churn. H. F. O., of L. I.-Wethink you can procure "Borden's Meat Biscuit" of J. H. Brower & Co., 45 South st., N. Y. S. W., of N. Y.-The camera-obscura is the best-the ca

mera-lucida the cheapest ; but there is a difference in the quality of instruments, just as much as in good and bad knives.

J. M. Jr., of Pa.-Use a very weak solution of glue, care fully put on, to cover your pencil drawings. J. H. K., of Va.-Your plan of a blast for furnaces will

work well enough, but a blower driven by the wheel, will do as well, and can be made and maintained at less expense.

J.S., of Ky .- Your book is much wanted ; your questions ou will find in another column. We have inquiries every

S. F., of Me.-We have no statistics showing what the | BF We are able to furnish all the back numbers of the presmportation has amounted to from the countries you specify, for the years 52, 53, and 54. H. F. B., of Ind .- Your letters patent, with ten dollars,

came duly. Your engraving will appear in next week's pa per. J. P. N., of N. Y .- Making an eaves trough pipe small

instead of large is not patentable. X. C. S. of Vt.-You could not patent the application of

a bow to a wood saw. It would not be considered the subject of a patent. J. S., of Mich.—It takes about seven times the quantity of

cold water to condense steam that you require for the boiler. You may save some of your steam by exhausting it in the cistern. If this does not answer your purpose, we do not advise you to try the condensing by a long pipe.

E. Z. F., of La.-You must try and establish your priority ofinvention as soon as possible, or your witnesses may soon be beyond your reach ; it will then become public property. you could not use it with safety. at present

A. S., of Phila.-We have tried to get you a receipt for securing india rubber soles on leather shoes; we have been tole that india rubber, cut in very small pieces, and some gutta percha, softened with warm turpentine, will, if laid upon the shoe, then heated with a hot iron, and the sole put on and pressed down, stick first rate.

S. D. C., of Wis.-Do you claim the plates secured to the wire, if so, we do not see how a patent can be obtained, the same principle is employed on all the telegraph lines.

A. W., of Ct.-When we replied to your inquiry in regard to alarm locks, there was evidently a mistake. We should have stated that an alarm lock (not clock) is an old device, several modificatious having been made in locks of this char acter. The application of an alarm to a lock could not now be patented

J. T., of Md .- Worm gearing for moving the carriage o a saw mill could not be patented. It has been used for an

alagous purposes. W. C., of Mass.—We have some petitions in our posse sion against the renewal of the Woodworth Patent, which we shall be very glad to furnish to those who may desire them. As we have but few, it is to be hoped that they will be faithfully used by those who call for them. B. F. & Son, of N. C.—Our edition of the patent laws is

entirely run through, and we are awaiting for some move ment of Congress towards an amendmentat this Session. Whenever we get another edition ready you shall receive a copy

T. G., of Ala .- W. M. Raymond & Co., 536 Breadway, this city, are the only agents we know of for the sale o

Fisk's Metallic Coffins, in this City. M. K. C., of Tenn.-Steam does not wind up when it ex hausts, as you state ; it rolls over and spreads out.

C. C. of New York-You must use acid diluted with wa

ter for etching, and wash off a number of times. The final washing must be given with warm water. J. T. W., of Ga.-If you could purify the water for your

poiler before it is used, you would find it the best plan. We have no suggestion to make at present. You will find it a matter of safety to use a lightning rod, even though your house is surrounded with trees.

J. H., of D. C.-We have not received the report men tioned in your letter. We arrived at the opinion you were in the right a long time ago. Ethnology is a useful science; we have never questioned that. The chemical tracts pre pared for the Institute were very good, but might have bee better ; this we judge from the means we have of obtaining such informatic

A. B. H., of Md.-We advise you to get a good steam en giue, and not use your wheel any longer, as your supply of water is precarious.

R. G., of D. C.-The hot air engine is defunct for a certainty. We do not wish to kick at a dead lion. We have had enough of the subject to last us for a considerable time.

W. N. M., of Mass.-It will require many years of hard study for you to become acquainted with any single branch of practical chemistry.

T. W., of Texas-Your method of extinguishing fur neither new nor patentable.

F. F., of N. Y.-If we saw the model of your liquid manure wagon, we could speak more intelligently on the sub-

ject ; from your sketch it appears to be good.

S. M. B., of Mass .- Yours will appear next week R. W., of Ind .- A cubic foot of water weighs sixty-two and a half pounds.

J. M. T., of Tenn.-Your invention appears to be a good one, and you should take measures as soon as possible to se

cureit by patent. W. W., of N. Y.-Camphene willnot explode in the liquid

Money received on account of Patent Office business for

the week ending Saturday, Feb. 3:-

A. W., of O., \$55; C. C., of Mich., \$30; B. & C., of N. Y., \$100; B. B. & Y., of N. Y., \$30; E. F. B., of Ct., \$30; J. H., of N. Y., \$30; J. A., of N. Y., \$55; C. C. R., of Pa., \$10; T. J. K., of Pa., \$25; B. & C., of Tex., \$25; K. & F., of Mass., \$30; D. S. H., of R. I., \$30; A. B. C., of N. Y., \$30; J. U. W., of N. Y., \$150; J. B. T., of N. Y., \$30 : M. S. K., of Pa., \$10 : L. C. S., of Ct., \$30 : A. L. of Pa., \$55; J. A., of N. Y., \$30; E. W., of N. J., \$25; H. & A., of N. Y., \$30; W. M., of N. Y., \$30; T. G., of R. I., \$30; G. L., of N. Y., \$55; T. O. M., of N. Y., \$30; J. Mc N. of N. Y., \$25; A. D. R., of N. Y., \$245; R. J. M., of N. Y.; \$30; E.B., of O., \$55; H. L., of N. Y., \$60; E. A. J., of N. Y., \$30; C. W. F., of Mass., \$65; S. H., of N. Y., \$30; A. M., of N. Y., \$25; J.M. B., 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, Feb. 3 :-

W. L., of Ma. ; S. & W., of N. J. ; I. W., of Wis

ent volume of the SCIENTIFIC AMERICAN, and to new subscribers we shall continue to send the back numbers as long as we have them, so as to render their volumes complete.

PATENT CLAIMS-Persons desiring the claim of any inven tion which has been patented within fourteen years, can obtain a copy by addressing a letter to this office, stating the name of the patentee, and enclosing \$1 for fees for copying.

-When money is paid at the office for subscriptions RECEIPTS 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 the receipt of their funds.

Terms of Advertising.					
4 lines, for each insertion,				\$1,00	
8	**	**		2,00	
12	••	h1	14	3,00	
16	34	11		4,00	

Advertisements exceeding 16 lines cannot be admitted neither can engravings be inserted in the advertising columns at any price.

I All advertisements must be paid for before inser ing.

# American and Foreign Patent

American and Foreign Patent Agency. MPORTANT TO IV EVITATIA --MESSIS M NN I & CO., Publishers and Proprietors of the SOTENTI-to AMERICAN, continue to prepare specifications and drawings, and attend to procuring patents for new inventions in the United States, Grat Britain, France, Beigium, Helland, Austria, Spain, etc., etc. We have constantly employed under our personal supervision a competent board of Scientific Examiners, which enables us to despatch with great facility a very large amount of business. Inventors are reminded that all matter in-trusted to our care are strictly confidential, and hence it is unnecessary for them to incur the expense of at-tending in person. They should first send us a sketch and description of thein vention, and we will carefully examine it, state our opinion, and the expense of mak-ing an application, if deemed new and worthy of it. Models and fees can be sent with safey from any part of the country by express. In this respect New York is more accessible than any other eity in our country. Circulars of information will be sent free of postage to and ine wishing to learn the preliminary steps toward markents should be employed in securing patents, as preva. Swuld be employed in securing patents, as preva swuld as integrity in taking proper care of the case until the inventor is duly invested with his legal rights. Parties intrusting their business in our hands can rely upon prompt and faithful attention. Most of the patents obtained by Americans in foreign countries are secured through us; while it is well known that the argest proportion of patents applied for in the U.S., go through our agency. The offices of Messrs. Munn & Co.'s American and Foreign Patent Agency are at 128 Fulton Street, New York; London, No. 32 Basex 84, Strand; Paris, No. 29 Boulevard St. Martin : Brussels. No. 6 Aue D'Or.

To ENGRAVERS AND CALICE FRINTERS The subscriber would like to sell State. county, or individual rights for his patent self-acting punching apparatus for shading small pattern and plain figured. It can be attached to any old screw machine for a tri-ling expense, and is warranked to give satisfaction or no pay. Reference, Messrs, Abbot & Saunders, Cromp-ton Print-works, Warrick, R. I., James Arthuren, fore-main engraver. Faxendale's patent eccentric doctor motion also for sale. For further particulars address JAMES BAXENDALE, care B. Dean & Son, Providence, R. I. P., Wanted, an old second-hand screw engra-ving machine. 222

**DORTABLE STEAM SAW MILL ENGINES** and Pennsylvania State Agricultural Society in 1851, 1853, and 1564. A number of these engines are now at work driving portable up and down, and circular saw mils, also mills where the water power has failed Cir-culars will be sent by addressing the inventor, A.L. ARCHAMIKAULT. Isth and Hamilton sts., Philadelphia, Pa. N. B. Portable engines always on hand. 224\*

**EVALUATION MAGNETIC MACHINES**—Telegraph Registers, Receiving Magnets and keys manufac-tured and for sale at No. 324 South Seventh street, Phil-adelphia, by W. O. & J. NEFF. 227

adelphia, by W. C. & J. NEFF. 227 UNITED STATES PATENT OFFICE, Washington, Jan. 11, 1855. ON THE PETITION of Loring Cose, of Worcester, data and the extension of a patent grant-ed to him on the 16th day of April, 1841, for an im-provement in "screw wrenches." for seven years from the expiration of sub qatent, which takes place out the 18th day of April, 1855. It is ordered that the said petition be heard at the Pat-ent Office, on Monday, the 2nd of April 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 writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing must be taken and transmitted in accordance with the rules of the office, which will be furnished on application. The testimony in the case will be closed on the 22nd of March; depositions and other papers relied on as testimony, must he in the office on or hefer the march

Application. The testimony in the case will be closed on the 22nd of March; depositions and other papers relied on as testimony, must be in the office on or before the morn-ing of that day, the arguments, if any, within ten days thereafter. Ordered, also, that this notice be published in the Union, Intelligencer, and Evening Star, Washington, D. C.: Evening Argus, Philadelphia, Pa.: Scientific Amer-ican, New York, and Boston Post. Boston, Mass., once a week for three successive weeks previous to the 2nd day of April next, the day of hearing. UHARLES MASON, Commissioner of Patents. P. S.-Editors of the above papers will please copy, and send their bills to the Patent Office, with a paper containing this notice. 203

**BOOTH'S PATENT GRAIN SEPAR TOR** Manufactured at Cuyahoga Falls, Ohio, warran Manufactured at Cuyahoga Falls. Ohio, warrant-ed to be the best thing of the kind ever used for milling purposes, with horizontal and perpendicular blast, also improved shaking riddle of perp orated cop per, giving a smooth surface, cleans from 10 to 500 bushels per hour of wheat, corn and buckwheat. Sections where garlic, oats, smut balls, etc., are troublesome, it is indispensa-ble to the manufacture of good flour. A more particular account will be given by addressing the manufacturer at Cuyahoga Falls, Ohio. J. L. BOUTH. 216

A CLIPPER AMONG THE MONTHLIES— The Monthly Nautical Magazine, devoted exclu-sively to the Maritime interests of the United States, embracing ship-building. commerce, navigation, and marine engineering—will commerce it second volume in April, 1855, enlarged to % pages. This work contains draughts of some of the finest vessels of the age, with to ther engravings, and is one of the most valuable publi-cations in the country. Terms, single copies 85 per an-num, or \$20 per volume. Glub Rates—Five copies for \$20: twelve copies for \$50. Sample copies sent when re-quested. Address (RLIFFITH8 & BATES, Editors and Proorietors, 79 John st., New York. 214

OUR CATALOGUE, of Optical, Mathematical, and Philosophical Instruments, in pamphlet form : a new edition, with numerous illustrations, is now in press and will be issued in a few weeks. This Catalogue is furnished on application, and sent by mail to all parts of the United States and the Canadas freeofeharge. MCALLISTER & BRO., Opticians, (Established in 1796), at their new store, 194 Chestnut street. Philadelphia. 218

A PROFITABLE INVESTMENT - Can be made result i ratile INVESTMENT-Can be made h by purchasing rights of our Parent Tenoning Ma-charies, patented Aug. 29th, 1864, pronounced by kood rechanies to be the best machine in use; is adapted to all tenis, of work including dusb; and cap tenons for car or other heavy work, will do ine work of from three 'to right ordinary machines, can be set in one minute for boring or squaring the ends of stuff for righter ma-ethings. Address C. P. S. WARDWELL, Lake Village, N. H. 194\*

MODELS FOR INVENTORS-CHARLES KIR. CHOFF, Manufacturer of Models, Scientific, Phi-losophical and Artistic Instruments, Machines. &c. cor-ner of West Broadway and Thomas street, New York.

HUB MORTISING MACHINE—Price Reduced— We have finished a few of Roys and French's pat-ent, undoubtedly the best machine for the purpose ever invented. We will take back the machine and refund the money, in all cases, if they fail to satisfy buyers. Wagon and earriage makers will do well to give them a trial. They will bere and mortise thirty to forty hubs a day, and answer also for other work. 204\* TEVIS & BARBAROUX, Louisville, Ky,

Power-at low rates, in the new buildings 7, 9, 11, and 13 Canal, corner of Elm: and 98, 100, and 102 Walk-er, Apply to M. J. GAUDU, Engineer, 102 Walkerst.

MACHINE GROUND CIRCULAR SAWS-Pat-international and the second se

THE FRENCH EXHIBITION-Parties who have applied for space in the French Palace of Industry, and who do not intend to be present at the Exhibition, are recommended by the undersigned to arrange with Messrs. Gardissal & Co., No. 29 Bonlevard St. Martin, Paris, who are prepared to put upon Exhibition, attend, and effect sales of articles intrusted to their care. It is a responsible concern. S. H. WALES, State Commis-tional to the state of a main and the free. a responsible concern. S. H. W. sioner, Scientific American Office.

**DUFFALO MACHINERY DEPOT-Terrace St. Dand 36 Lloyd st. Buffalo ; J. W. HOOKER, Proprie-tor, H. C. Brown. Superintendant, offers for sale Ma-chinists' tools of all kinds : Engine Lathes, Planers, Drills, Chucks, Boring Mills; also machinery of all kinds on hand or furnished to order. 7tf** 

TAVE AND BARREL MACHINERY-Hutchin-son's Patent. This machinery which received the highest award at the Crystal Palace, is now in daily op-eration there. Staves, heading, &c., prepared by it are work to the cooper 20 to 40 per cent, more than when finished in any other way. Special attention is invited to the improved Stave Jointer. Apply to C. E. HUTCH-INSON & CO., Crystal Palace, or Auburn, N. Y. 13 tf

**PATENT DRIERS**—Zinc Driers, Graining Colors, Store Polish, Gold Size, &c., 214 John street, New York, QUARTERMAN & SON, Manufacturers. 16m

HARRISON'S GRAIN MILLS-Latest Patent.-equal. A supply constantly on hand. Liberal Commis-sions paid to agents. For further information address New Hayee Manufacturing Co., New Hayen, Conn., or to 8. O. HILLS, our agent, 12 Platt Street, New York.13 tf

NORCROSS ROTARY PLANING MACHINE-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 Nicholas G. Norcross, of date Feb. 12, 1850, for a Rotary Planing Machine for Planing Boards and Planks, is not an infringemet of the Woodworth Patent. Rights to use N. G. Norcrois'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; Poston, 27 State street, and Lowell, Mass. 16 6m<sup>-</sup>

CHEAP LIGHT-A. M. MACE, manufacturer of at-mospheric or Benzole Gas Machines: size from 2 to 1000 lights. All orders promptly executed corner of Main street and Harrison avenue, Springfield, Mass. 15 3m\*

WACHINE'T'S TOOLS-SHRIVER & BROS, Cum-berland, Md., (on B. and O. Railroad, midway be-tween Baltimore and the Ohio River,) manufacturers of Lathes, Iron Planers, Drills and other machinists tools 50 6m<sup>+</sup>

STATIONARY STEAM ENGINES-The subscriber is now prepared to furnish, with or without TATIONARY STEAM ISNERATION SUBJECT TO SUBJECT AND A SUBJEC

175

week for a good work on millwrighting; there is not one in	of .; A. W., of .; B. & (
print.	A. M., of N. Y.; C. W., of I
C P F of Vound has been needined association	<b>T A 10 B A A A A A A A A A A</b>

Yours has been received respecting | B., of N. Y.; C. M., of N. Y. raising water for cattle.

G. A. B., of Me .- Your plan of increasing the buoyancy of vessels is an old one ; some vessels are built in that man-

W. R., of Ky.-You must use lead and leather for the valve of the air gun. The surface of the lead must be

scraped perfectly smooth. N. P. L., of Canada West-We cannot tell you what is the best speed to drive your circular saw. You may drive it just as fast as you can ifit is well hung. You need not be afraid.

E. R. R., & L. L., of Ill.-We have not answered you be-fore, because the question, we thought, might easily be answered by asking yourselves, what is a wedge. Your roas certainly will not answer in the affirmative. If they are not levers what are they? As combined with the top lever

they form a compound lever. J. T., of Pa.—We discover nothing new or patentable in yate power wagen.

ા

C., of Tex.; T. J. K., of Pa. Cenn. ; E. W., of N. J. ; J. M.

### Important Items.

MODELS-We are receiving almost daily, models of inven-tions which have not the names of their inventors marked upon them. This usually prevents us from taking any notice of them whatever. We shall esteem it a greatfavor if inventors will always attach their names to such models as they send us. It will save us much trouble, and sometimes prevent the model from being mislaid.

BACK NUMBERS AND VOLUMES-We have the following num bers and volumes of the SCIENTIFIC AMERICAN, which we can supply at the annexed prices :--Of Volume 5, forty numbers; price in sheets, \$1; bound, \$1,75. • f Volume 6, all; price in sheets, \$2; bound, \$2,75. •f Volume 7, all; price in sheets, \$2; bound, \$2,75. •f Volume 8, none complete, but about 30 numbers in sheets, which will be sold at 50 cents per set. Of Volume 9, complete in sheets, \$2; bound, \$2,75.

TEVIS & BARBAROUX, LOUISVILLE, KY.-Manufacturers of Steam Engines, Mill Machinery, superior Force and Lift Pumps, cast iron Screw Pipes for gas, steam, or water, largely used by railroads in sup-plying water stations, or suction pipes for pumps, etc., etc., being cheaper and better than copper or lead. To bacco, Lard. Timber, and Mill Screws, always on hand. Castiron Railings, Railroad and Car wheels, other cast-ings for railroads, and general job work. 20 4\*

Angle of halfware, and general yours. A set of the set

Network HAVEN MANUFACTURING COMPANY Machinists' Tools. 65 Iron planers of all sizes : 350 Engine and Hand Lathee, all sizes : 50 Upright and Horiz ontal Drills : 25 Boit Curters : 10 Gear Curters : all kinds and sizes of Chucks, Slide Rests, Hand Drills, &c. These tools are of superior quality, and as they are built by the quantity, can be afforded and will be sold at bw rates. For cuts giving full description and pri-ces, address New Haven Manufacturing Co., New Ha-; ven, Conn. 21 tf

12 Platt st., Nev 9 e3wtf

VI IRE HOPE OF HON AND COPPER-For Mines, Inclined Planes, Hoisting and Steering purposes, Stays or Braces, &c., &c., much safer and far more durable than the best hemp or hyde ropes. Also for Sash Weights, Dumb Waiters, Lightning Conducters, &c. CHARLES W. COPELAND, No. 64 Broadway. 14 cowtf

B. ELV, Counsellor at Law, 52 Washington st., Boston, will give particular attention to l'atort Cases, Refers to Messrs, Munn & Co., Scientific Ameri-can.

7 AIL'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 castinge secuted with dispatch. 81y LOGAN VAIL & CO., 9 Gold st., N.Y.

VORTHVILLE MACHINE, WORKS-Maguitacto-nery of Machinets Tools, consisting of Engine Lathes, Power Planers, Hard Lathes, Engine Lathes for turning chair stoff, all of the most improved patterns and quality of workmanship, Worcester, Northville, Mass. Augus 1854. TAFT & QLEASON. 5019 ď٢