## Scientific American.



Machine for making Paper Segars .- We have a corres pondentfrom South America who wishes to purchase a machine for the above purpose. We shall be glad to receive information in regard to where one can be seen in

A. W. King, of South Hanover, Ind., wishes to ascer tain where he can procure the best machinery for manu facturing corn starch.

J. A. L., of Tenn.-You propose to amend the paten law by compelling inventors to engage in manufacturing their inventions for two years before granting a patent If such a law were in force, it would kill the mos meritorious. Such a law would have prevented James Watt from obtaining a patent for the steam engine. He had no means, like hundreds of other excellent inven-, to engage in manufacturing for himself.

L. M. F .- You appear not to be aware that a tunnel under the East River was proposed some years since. Your plan may be a sgood as that of others. If you be-

lieve it to be better, bring it before the public.
W. C. R., of C. W.—Your water power of 18 ft. head and 400 inches of opening at its foot, is about 114 horse power allowing one foot of head equal to one foot of perpendi-

W. W. H., of Ind .- We will give you a rule to calcu late the horse power of your engine, and you can then work out the minutiæ yourself. Multiply the speed of of the piston in feet per minute into the mean pressure per square inch of piston, and divide by 33,000 —the result is the amount of horse power; no allowance is thus made for friction.

G. A., of Ga.-An elevated fountain will raise water in a tube to its own level, no higher. With a hydraulic ram, a fountain ten feet high will raise a jet of water fifty feet high, but will only discharge at that hight one fifth of the water used. Address Joseph Strode, West Chester, Pa., forother information you desire.

J. H., of Md .- A cheap wash for rough boards may be scales and ashes from a black withlime and the smith's shop. It is put on like common whitewash, and it has the color of light buff. You need not be particular as to the proportions of lime and iron oxyd. Do not expect it to be so durable as paint.

G. P., of C. W.—On page 25 of Vol. 5, Sci. Am., you will find an engraving of a submarine lamp.

S. B. B., of Texas.—Rosin oil is too smoky to be used in common lamps. There is no useful work to our knowledge published on tinsmithing.

J. A. S., of Phila:-Common putty is a good plastic material for making patterns of castings. Gutta percha is excellent for making patterns for cold moulding, such as plaster of Paris, but is not suitable for hot moulding The putty mould must be allowed to dry before it is used and the surface should be dusted over with the flour of shell lime.

G H of New York -The communication on another column relating to Berlin castings may lead you to adopt such a course as the one respecting which you reques

information from us.

M. B., of N.Y.—Your burning fluid may be very excellent. It does not interfere with any patent so far as

we know.
J. W. & Co., of Mass.—The articles on galvanization in the last and present number will give you all the in-

F. E. B., of Conn.—The water pipes must be wholly made of hydraulic cement, or they will not answer. We would not advise you to employ such for carrying the water over a hill of twenty feet high from a fall of 100 feet. Use either lead or iron pipes for this purpose. The 100 feet fall will cause a very rapid current—a velocity of eighty feet per second at the foot of the pipe.

J. W. K., of N. H.-The velocity of water down an incline is just in proportion to the vertical fall. If the incline be fifty feet long, and the perpendicular fall only nine feet, the velocity will be 24 feet. This leaves the friction of the incline out of the question.

E. M. E., of Pa.-Wax dissolved in alcohol is a cemen much used by instrument makers, also putty colored rec with vermilion.

C. A. M., of Mich.—The Engineer and Machinists'
Drawing Book, sold by Blackie & Son, this city, will answer your purpose, as it contains several drawings of

J. M. B., of Pa .- A patent could not be obtained for an instrument for drawing nails constructed after the model of dent ists' forceps for extracting roots of teeth. In such a case as this you have clearly invented nothing not already known to the mechanical arts. If there is any substantial change in the construction of the instrument it might be made the subject of a patent.

P. M., of N. Y.—Four parts of iron filings, a like quan

tity of potters' clay, and the same of old crucibles reduced to powder, and made into a paste with salt water, makes a strong and durable fire-proof cement. It must be allowed to dry slowly before being exposed to fire. Fire-clay will answer as a substitute for the old crucibles

G. B., of Conn.—Smees' Electro-Metallurgy, published by J. Wiley & Co., this city, will give you the information on electro plating. It would require several pages of manuscript to describe the process of treating jewelers sweepings to recover the gold and silver. Steel springs are all tempered in oil.

E. B. C., of Mass. - We have seen small cut pinions case-hardened, but not large wheels. We have never heard a complaint made against cut gearing on account of being too soft.

J. W. H., of Mass.—" Please inform me whether an in dividual has a right to manufacture and use a patented article, provided he does not offer it for sale; and also whether a party buying an article of an assignee can carry it into territory not owned by the assignees, and se it for his own benefit'?" The above inquiries are very often made of us, and are frequently answered through this column. A patent is an exclusive monopoly, and, to say nothing about the use, no person has a right to even ufacture an article upon which a patent exists with-he owner's consent. What would be the value of any patent if it could be thus made and used without the consent of the patentee? None whatever.

G. C. W., of Mass,—There is no good recent workon the steam engine. John Bourne's Treatise, price \$6, or the same author's Catechism, price 75 cts., are good.

on account of Patent Office business for the week ending Saturday, May 2, 1857 :--

G. W.B., of N. Y., \$30; W. W. B., of N. Y., \$27; S G. W.B., of N. I., \$50; W. W.B., of N. I., \$21; S. A. B., of L. I., \$30; S. D. II., of N. H., \$30; C. F. H., of Pa., \$30; W. & E., of Md., \$25; J. H., of Ala, \$55; C. & S., of N. Y., \$225; J. H. P., of N. J., \$30; J. McI., of Ill., \$30; S. O. C., of R. I., \$30; J. L. F., of Ill., \$30; A. B. G., of Conn., \$30; J. W. L., of N. Y., \$30; W. W. D., of Cal., \$170; G. S. M., of Ill., \$25; C. and C., of Mass., Sai, W. S., of N. H., \$12; C. B., of M. T. \$13; A. C., of N. Y., \$35; S. L. W., of Pa., \$30; C. A., of N. Y., \$60; A. B. J. F., of Ind., \$30; J. G., of O., \$30; J. W. P., of Ill., \$35; J. V., of Pa., \$30; J. F. R., of Iowa, \$30; J. M. E., of Conn., \$55; G. W., of N. Y., \$25; T. C., of N. Y. \$25; S. H. W., of O., \$25; P. & N., of N. J., \*25; T. M. of N. Y., \$30.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, May 2, 1857:

G. W., of N. Y.; D. S. McN., of N. Y.; W. W.B., o N. Y.; E. F., of Iowa; S. O. C., of R. I.; A. R., of Tex. T. C., of N. Y.; W. & E., of Md.; J. E., of N. Y.; A. B J. F., of Ind.; B. A. A., of Ind.; C. W., of R. I.; C. B., of M.T.; A. C., of N. Y.; S. H. W., of O.; P & N., of N. J.; T. M., of N. Y.; A. & M., of Ill.; T. V., of Cal. A. B. G., of Conn.

COMPLETE SETS OF VOLUME XII EXHAUSTED. We regret that we are no longer able to furnish complete sets of the present volume. All the back num bers previous to No. 27 are entirely exhausted.

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PATENT LAWS AND GUIDE TO INVENTORS.—This pam phlet contains not only the laws but all information touching the rules and regulations of the Patent Office Price 12 1-2 cents per copy. A Circular, giving in structions to inventors in regard to the size and proper construction of their models with other useful inform tion to an applicant for a patent, is furnished gratis at this office upon application by mail.

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