Scientific American.

CORRESPONDENTS

A. W. A.-Correspondents who expect answers to their letters must furnish us with their full address. We cannot undertake to preserve letters among our files without knowing the writer's name.

D. H., of Conn.—We perceive no novelty in your for ceps whatever. Watchmakers and surgeons are all provided with such instruments, and the use of them to p 11 out corns is no more novel than it would be to use a lancet for cutting them instead of a knife. 'The combination of several instruments in one handle is not patentable.

R. P., of Conn.-As soon as your case is acted upon a the Patent Office we will advise you by mail. It is no reason because another party has received a Patent whose papers were filed since yours that you are being neglected at the Patent Office. It is probable the invention to which you allude came under another department in examination, who had not so many cases in hand a the examiner who has your matter in charge. In some of the examiner'srooms, the work is kept so closely up, that an applicant has to wait but a few days to have his case examined, while others are months behind.

M. B., of N. Y.-Youare quite right regarding the prac tibility of collecting a smallcolumn of water from springs on a hill two hundred feet high, and employing it to drive a grist mill. In a factory at St. Blasier, in Baden, there is a turbine wheel only 14 1-4 inches in diameter, under column of 354 feet high, conveyed in a pipe 16 inches diameter. It drives 8,000 spindles, roving frames, carding engines, &c. Under 100 feet head, a wheel discharging only one cubic foot per second is equal to 6 72-100 horse power; this allows for 25 per cent of loss by friction, &c You cannot decompose water by an electric current, and

use the gases profitably for generating motive power. C. J. H., of N. Y.-We are not able to tell you what increase of power you may obtain in your engine by adopting the Wethered system of mixed common and superheated steam. A strong solution of isinglass is a good cement for leather belts; a better, is a cement comosed of equal parts of india rubber and asphalt dissolved in turpentine.

S. F. M., of S. C .- If you were to isolate your house by glass from the earth, instead of preventing danger from disruptive discharges of lightning, you would increase the danger

F. S., of Phila.-You should try an experiment in heat ing the leaches in your tannery with the exhaust steam of the engine. The expense would not be great. It is our opinion that the increased resistance to the exhaust will not counterbalance the saving of fuel you would effect.

A. R. D., of Mass.-Glycerine is soldat a high price by druggists in this city—why, we cannot tell—as it is not much used, and is generally suffered to go to waste in soap works. If it were sold cheap, great quantities of it would be used.

F. G. R., of Va.-Brass and copper are superior to iron in drills for sowing guano with the seed. These metals in drills for sowing guano with the seed. These metals will not oxydize so rapidly with the ammobia of the guano as iros. An alloy of fead, tin and copper, we believe, would be excellent for the purpose. Charcoal dust mixed with the guano would scour the iron ifit were used, and keep it free of rust.

N. A. M., of Ala.—A force pump is the best apparatus you can use forsupplying your boiler with water from a pond or well sixty yards distant, and eighteen feet be low the boiler. Employ a cast iron pipe for conveying the water.

J. M. & Co., of Ohio.-A hydraulic ram can be made o sufficient capacity to discharge the water flowing through a 12-inch pipe under a fall of eight feet. We do not know what would be its cost. We do not advise you to get such a ram. The water, with the fall you have, might be employed on a small turbine wheel to work a pump that would raise more than could be elevated by a ram.

J. G. E., of N. C.-A pressure of 4 1.11 pounds on each square inch, with a velocity of 24 feet per second will certainly give over a horse power for every 10 squareinches of water exit. This allows the deduction of one-third for loss. We have made the calculation in the same manner as for a steam engine-that is, multi-plying the pressure upon the 10 inches, that into the speed per minute, and divided by 33,000.

H. W. & Co., of N. Y .- The mere purchase of a machine from a patentee does not necessarily include the right to use it at all. There must be an agreement in regard to the right to use. If you purchased machines without any specific understanding with the patentee in regard to the right, he could undoubtedly restrict you

In their sale to the territory which you own. D. A. B., of Ala.—As far as we are capable of judging from the sketch and description you send of your sewing machine, it contains no feature of patentability. The wo-pointed shuttle for making a stitch by its more in each direction, is included in the first patent of A. B Wilson, granted, we believe, in 1850.

C. H. D., of N. Y -The barrels of gunsare browned by forming an oxyd on their surface with a weak acid Take a little nitric acid, and dilute it with ten times its measure of water, rub the gun barrel over with this by a sponge, then set it aside for 24 hours to rust, now rub off the rust with a scratch brush, and put on the acid a second time, and set it past for24 hours longer. After t his, it is steeped for a short time in lime water, and then allowed to dry; the rust brushed off again, when the barrel is then oiled and dried. Nitrate of copper and muriate of iron, in equal quantities, are sometimes em-ployed in place of the dilute nitric acid.

Money received at the Scientific American Office on account of Patent Office business for the week ending Saturday, May 23, 1867 :--J. W. C., of Ky., \$12; N. T., of Me., \$25; J. L. S., of

N. C., \$26; J. B., of Toxas, \$30; P. N. W., of Ohio, \$30; R. H. T., of N. Y., \$135; E. A. S., of Pa., \$31; A. Van D. of N.Y., \$30; J. J. O., of Miss., \$25; D. W. H., of Mo., 61 N.I., 530; J.J. C., of Miss., \$20; D. W. H., of Mo., \$30; W. H. G., of N. H., \$30; L. S. C., of N. Y., \$30; I. H. W., of N. Y., \$100; A. T., of Mich, \$25; J. M., of Ind, \$250: E. T. M., of Mass., \$25; J. N. C., of O., \$100; J. W., of O., \$30; J. A. D., of N. Y., \$25; R. G. Jr., of (Mass., \$30; T. E. S., of Pa., \$30; C. H. T., of L. I, \$25; D. C., of Pa., \$25; J. P. C., of N. Y., \$30; J. F. H., of N

U SALE

C. T., of Ill., \$50; S. A. B., of L. I., \$25; C. B. S., of Mass., \$27; S. I., of L. I., \$25; I. H. P., of N. J., \$25; F. S., 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, May 23, 1857 :

J. W. C, of Ky., ; N. T., of Me. ; J. B., of Texas ; S. A B., of L. I.; E. A. S., of Pa., (5 cases); A. T., of Mich.; J. L. S., of N. C.; C. B. S., of Mass.; E. T. M., of Mass.; I. H. C., of Ill.; C. H. T., of L. I.; D. C., of Pa.; J. A. D., of N. Y.; W. A. J., of La.; S. I., of L. I.; T. S., of Pa., F. S. of N. Pa.; F. S., of N. Y.

Important Items.

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

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CORES. THE UNDERSIGNED having had ELEVEN years' practical experience in soliciting PATENTS in this and foreign countries, beg to give notice that they con-tinue to offer their services to all who may desire to se-cure patents at home or abroad. Over three thouses Letters Patent have been issued, whose papers were prepared at this Office, and on an average *filten*, 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 applications 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 patentability of inventions placed before us for ex-mination. Private consultations respecting the natentability of in-

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Y., \$10; S. G., of N. Y., \$50; S. G. McM., of Ill., \$55; J. C. T., of Ill., \$50; S. A. B., of L. I., \$25; C. B. S., of dealers in inventions to KELLOGG & DODGE, celestra in achiever, c. charleston, S. C. 1*

DR. D. BREED, late Assistant and acting Chief Ex-aminer in the U. S. Patent Office. has established **B.** D. HELEELP, late Assurant and the stabilished at Washington, D. C., a chemical laboratory for experi-ment and analysis, in order to test and improve processes of manufacture, and mechanical devices employed in the chemical arts, and to procure and defend patent rights. After many years devoted to chemistry (having studied in the German laboratories) Dr. Breed feels confident in offering his services as a practical chemist to inventors and others interested in the chemical arts and manufac-tore.

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