Sixth, The combination and arrangement of the hem turner, G presser piece, H, roller, K, and adjustable gage, C, substantially as described and for the purposes specified.

DESIGNS.

1,839 to 1,847.—Nine Patents for Carpet Patterns.—E. J.
Ney (assignor to the Lowell Manufacturing Company),
Lowell, Mass.

1,848.—Turn-over Collar.—Chas. H. Welling, New York

IMPORTANT TO INVENTORS.

PATENTS FOR SEVENTEEN YEARS.

MESSRS. MUNN & CO., PROPRIETORS OF THE



stinue to solicit patents in the United States and all foreign countries, on the most reasonable terms. They also attend to various other departments of business pertainingto patents, such as Extensions, Appeals before the United States Court, Interferences, Opinions relative to Infringements, &c. The long experience Messrs. Munn & Co. have had in preparing Specifications and Drawings has rendered them perfectly conversant with the mode of doing business at the

United States Patent Office, and with the greater part of the inventions which have been pacented. Information concerning the patentability of inventions is free y given, without charge, on sending a model or drawing and description to this office.

THE EXAMINATION OF INVENTIONS.

Persons having conceived an idea which they think may be patentable, are advised to make a sketch or model of their invention, and submit it to us, with a full description, for advice. The points of novelty are carefully examined, and a written reply, corresponding with the facts, is promptly sent free of charge. Address MUNN & CO. No. 37 ParkRow, New York.

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE

The service we render gratuitously upon examining an invention does not extend to a search at the Patent Office, to see if a like invention has been presented there, but is an opinion based upon what knowledge we may acquire of a similarinvention from the records in our Home Office. But for a fee of \$5, accompanied with a model of drawing and description, we have a special search made at the United States Patent Office, and a report setting forth the prospects of obtaining a patent, &c., made up and mailed to the inventor, with a pamphlet, giving instructions for further proceedings. These preliminary examinations are made through our Branch Office, corner of F and Beventh streets, Washington, by experienced and competent persons. Many thousands of such examinations have been made through this office. Address MUNN & CO., No. 37 Park Row, New York.

HOW TO MAKE AN APPLICATION FOR A PATENT.

Every applicant for a patent must furnish a model of his invention if susceptible of one; or, if the invention is a chemical productions he must furnish samples of the ingredients of which his composition consists, for the Patent Office. These should be securely packed, the inventor's name marked on them and sent, with the Government fees, by express. The express charge should be pre-paid. Small models from a distance can ofte be sent cheaper by mail. The safest way to remit money is by a draft on New York, payable to the order of MUNN & CO. Persons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents; but, if not convenient to do so, there is but little risk in sending bank-bills by mail, having the letter registered by the postmaster. Address MUNN & CO., No. 37 Park Row, New York.

The revised Patent Laws, enacted by Congress on the 2d of March, 1861, are now in full force, and prove to be of great benefit to all parties who are concerned in new inventions.

The duration of patents granted under the new act is prolonged to seventeen years, and the Government fee required on filinganapplisation for a patent is reduced from \$30 to \$15. Other changes in the fees are also made as follows:—

On filing each Caveat
On filing each Caveat
On issuing each original Patent\$20
On appeal to Commissioner of Patents\$20
On application! ir Re-issue
On application for Extension of Patent
On granting the Extension
On filing a Disclaimer
On filing application for Design, three and a half years\$10 On filing application for Design, seven years\$15
On filing application for Design, seven years
On filing application for design, fourteen years

The law abolishes discrimination in fees required of foreigners, excepting natives of such countries as discriminate against citizens of the United States—thus allowing Austrian, French, Belgian, English, Russian, Spanish and all other foreigners except the Canadians, to enjoy all the privileges of our patent system (but in cases of designs) on the above terms. Foreigners cannot secure their inventions by filing a caveat; to citizens only is this privilege accorded.

During the last seventeen years, the business of procuring Patents I or new inventions in the United States and all foreign countries has been conducted; by Messrs. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN; and as an evidence of the confidence reposed in our Agency y the inventors throughout the country we would state that we have acted as agents for at least TWENTY THOUSAND inventors In fact, the publishers of this paper have become identified with the whole brotherhood of inventors and patentees at home and abroad. Thousands of inventors whom we have taken out patents have addressed to us most flattering testimonials for the services we have rendered them, and the wealth which has inured to the inventors whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! We would state that we never had a more efficient corps of Draughtsmen and Specification Writers than those employed at present in our extensive offices, and we are prepared to attend to patent business of all kinds in the quickestime and on the most liberal terms.

REJECTED APPLICATIONS.

Weare prepared to undertake the investigation and prosecution of rejected cases on reasonable terms. The close proximity of our Washington Agency to the Patent Office affords us rare opportunities for the examination and comparison of references, models, drawings, documents, &c. Our success in the prosecution of rejected cases has been very great. The principal portion of our charge is generally left dependent upon the final result.

All persons having rejected cases which they desire to have prosecuted, are invited to correspond with us on the subject, giving a brief bistory of the case, inclosing the official letters &c.

CAVEATS.

Persons desiring to file a careat can have the papers prepared in the shortest time by sending a sketch and description of the invention. The Government fee for a careat, under the new law, is \$10. A pamphlet of advice regarding applications for patents and careats, printed in English and German, is furnished gratis on application by mail. Address MUNN & CO., No. 37 Park Row, New York.

FOREIGN PATENTS.

We are very extensively engaged in the preparation and securing of patents in the various European countries. For the transaction of this business we haveoffices at Nos. 66 Chancery lane, London; 29 Boulevard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. We think we can safely say that THREE-FOURTHS of all the European Patentssecured to American citizens are procured through the Scientific American Patent Agency, No. 37 Park Row, New York. Inventors will do well to bear in mind that the English law does not limit the issue of patents to inventors. Any one can take out a patents.

Circulars of information concerning the proper course to be pursued in obtaining patents in foreign countries through our Agency, the requirements of different Government Patent Offices, &c., may be had gratis upon application at our principal office, No.37 Park Row, New York, or any of our branch offices.

ASSIGNMENTS OF PATENTS.

Assignments of patents, and agreements between patentees and manufacturers are carefully prepared and placed upon the records at the Patent Office. Address MUNN & CO., at the Scientific American Patent Agency, No. 37 Park Row, New York.

Patent Agency, No. 37 Park Row, New York.

It would require many columns to detail all the ways in which inventors or patentees may be served at our offices. We cordially invite all who have anything to do with patent property or inventions to call at our extensive offices, No. 37 Park Row, New York, where any questions regarding the rights of patentees will be cheerfully answered.

Communications and remittances by mail, and models by express (prepaid), should be addressed to MUNN & CO., No. 37 Park Row, New York.



H. W., of N. Y.—The item you criticize in relation to the small engine was published as the result of actual experiments carefully made, and the power, is the result of the conditions mentioned in the items; it is not guess work; we see no ground for ar gument. We do not wish to revive the old idiscussion about working steam expansively.

D. J. P., of Wis.—Address F. Pease, Buffalo, N. Y., for a

A. G., of N. Y.—You will find an illustrated description of Ericsson's caloricengine ou page 268, Vol.XIII. (chl series) of the Scientific American.

E. W. H., of Wis.—An expanding shot for cannon is not new. It has frequently been shown to us since the war commenced

A. M. V., of R. I.—George Steers.

N. & S., of N. H.—Address the Collinsville Co., Collinsville, Conn., for cast-steel castings.

Qua., of C. W.—Use a short pipe and a long shaft; but place your engine nearer the boiler, if possible. Avoid long steam pipes, for although shafting consumes power, it is not so great a source of waste as the loss of heat from the steam caused by a long pipe.

G. W. K., of Pa.—India-rubber will not destroy magnetism in steel. It is an insulator, but not a destroyer of electricity. A magnet will attract iron, although a piece of glass may be interposed between the two; and glass is a better non-conductor than india-rubber.

R. B. D., of Ky.—A mistaken idea is conveyed by the use of the term "mechanical powers" for the lever, the inclined plane, &c. There is no power in a lever, inclined plane, wheel or axle. These are merely mechanical agents for communicating power. A fulcrum is simply a point or place of rest for a lever. Your article does not make the proper distinction respecting the nature of these agents.

B. & R., of Ill.—The chloride of silver may be reduced to a metallic condition by feeding strips of zinc into a solution of the chloride acidulated with muriatic acid, when the silver will be precipitated and the chlorine will unite with the zinc. Wash the precipitated silver, then dry it thoroughly and melt in a crucible. If fused with the carbonate of soda or potash, in a crucible, the chloride of silver will also be reduced to metallic silver.

E. W. M., of Mass.—Steam cars for city railroads are quite practicable. Do not be afraid of street mud as an obstruction, for the engine can keep the rail clear by using brushes in front of the wheel. You will find a locomotive and car for city railroads illustrated on page 257, Vol. V. (new series) of the Scientific

C. G. S., of Md.—Bourne's improved catechism of the steam engine, published by D. Appleton & Co., of this city, will give you the desired information about valves. Large works on steam engines are very high in price at present.

R. B. K., of Ky.—Perhaps no person will dispute your proposition respecting the results obtained by making the fulcrum of the lever the driver; but there is no inherent power in a lever.

G. F. W., of Fairport.—We have not a single spare num-

G. F. W., of Fairport.—We have not a single spare number of our paper which contains the engraving of Page's electromagnetic engine. You can obtain a magnetic beliee of Messra. Chester, 104 Center street, this city,

C. S., of N. Y.—All the black chromate inks made with logwood deposit a thick sediment. A remedy for prevening the precipitate has been found in gum arabic, but we prefer the evil to the remedy, as the gum closs up the pen and the ink does not flow so freely.

E. D. B., of N. Y.—A Board of Examiners for applicant engineers to the navy meets at different places, and the time and place of meeting are usually advertised before-hand. You will find information respecting the mode of applying for examination on page 187, Vol. VII. (new series) of the SCIENTIFIC AMERICAN.

W. S. S., of Mass.—We are not acquainted with any odorless solvent of india-rubber. Benzole is a good solvent, and is not very unpleasant to the sense of smell—some people rather like it. Naphtha—a very good solvent—has a very unpleasant odor.

A. M. D., of N. Y.—Portable saw-mills were manufactured a few years ago, by W. Montgomery, of Yonkers, N. Y., and J. Brown, of Baltimore, Md., but we know not whether these manufacturers are now engaged in the business.

Money Received.

At the Scientific American Office, on account of Patent Office business, from Wednesday, Nov. 11, to Wednesday, Nov. 18, 186:—

186:—
A. J. M., of N. Y., \$25; L. ●. C., of Pa., \$25; J. D. H., of N. Y., \$41; W. F. R., of N. Y., \$16; R. H. R., of N. Y., \$20; T. J. T., of Md., \$20; A. B., of Conn., \$20; H. A. A., of N. Y., \$20; T. J. T., of Md., \$20; A. B., of Conn., \$20; H. A. A., of N. Y., \$20; C. F. T., of N. Y., \$45; S. B. W., of Kansas, \$20; B. & B., of Mass., \$30; C. C. A., of N. Y., \$48; H. M., of Ill., \$25; J. A. L., of N. H. \$16; R. B. C., of Mass., \$46; C. & B., of Mass., \$316; J. W., of Iowa, \$25; T. G., of N. Y., \$33; C. F. B., of Conn., \$250; E. S., of N. Y., \$10; D. E. C., of N. Y., \$25; W. S., of N. Y., \$41; S. H. M., of Ill., \$20; J. W., of Iowa, \$20; A. ●., of N. Y., \$42; S. H. M., of Ill., \$20; J. W., of Iowa, \$20; A. ●., of N. Y., \$45; P. M. R., of Cal., \$30; E. W. B., of N. Y., \$16; B. H., of Pa., \$20; W. M. of Ill., \$15; R. E. & A. ●., of N. Y., \$16; J. A. H., of Pa., \$20; W. M. of Ill., \$15; R. E. & A. ●., of N. Y., \$16; B. B., of Pa., \$25; Φ. & F., of N. Y., \$25; W. E. C., of Ill., \$15; W. & H., of Cal., \$20; J. Il., of Ill., \$25; W. W., of N. Y., \$41; R. H. of Mass., \$25; J. J., of Maine, \$44; W. N., of N. Y., \$16; C. C., of N. Y., \$16; C. C., of N. Y., \$16; R. D. of N. Y., \$20; J. P., of N. Y., \$20; J. P., of N. Y., \$20; J. P., of N. Y., \$20; G. F. of N. Y., \$16; R. D. C., of England, \$100; W. K., of N. Y., \$16; C. W., of N. Y., \$16; G. W. B., of N. Y., \$16; D. R., of Ill., \$16; J. P., of Mass., \$25; J. H., of N. Y., \$16; G. B. R., of Ill., \$16; J. P., of Of N. Y., \$16; D. P. S., of N. Y., \$16; G. B. R., of Ill., \$16; J. P., of Of N. Y., \$16; D. W. B., of Occurs, \$10, N. Y., \$16; J. P., of Mass., \$25; J. H., of N. Y., \$16; G. B. R., of Ill., \$16; J. P., of Of N. Y., \$16; D. P. S., of N. Y., \$16; G. B. R., of Ill., \$16; J. P., of Of N. Y., \$16; D. W., \$16; D. R., of N. Y., \$16; D. D. C., of England, \$100; W. K., of N. Y., \$16; D. W. B., of Conn., \$12; G. S., of N. Y., \$16; D. D. C., of Ill., \$16; D. W., \$16; D. W., \$16; D. M., \$16; D. W., \$16; D. W., \$16; D. W., \$16; D. D. C., of N. Y., \$16; D. D. C., of N. Y., \$16

Persons having remitted money to this office will please to examine the above list to see that their initials appear in it, and if they have not received an acknowledgement by mail, and their initials are not to be found in this list, they will please notify us immediately, and inform us the amount, and how it was sent, whether by mail or express.

Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Paten t Office, from Wednesday, Nov. 11, to Wednesday, Nov. 18, 1863:—

A. J. M., of N. Y.; D. E. C., of N. Y.; W. S., of N. Y.; R. E. & A. G., of Pa; J. H., of Ill.; H. M., of Ill.; E. S., of N. Y.; R. H., of Mass.; S. & C., of Pa; C. W. B., of Conn.; D. L., of Vt.; W. W., of N. Y.; J. D. H., of N. Y.; A. C. E., of Mass.; H. H. H., of N. Y.; H. T. S., of Pa; L. C. C., of Pa.; W. S., of N. Y.; B. & R., of N. Y.; J. W., of Iowa; T. C., of N. Y.

TO OUR READERS.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the patentee and date of patent, when known, and inclosing \$1 as fee for copying. We can also furnish a sketch of any patented machine issued since 1863, to accompany the claim, on receipt of \$2. Address MUND & CO., Patent Solicitors, No. 37 Park Row, New York.

Models are required to accompany applications for Patents under the new law, the same as formerly, except on design patents when two good drawings are all that are required to accompany the petition, specification and oath, except the Government fee.

RECEIPTS.—When money is paid at the office for subscriptions, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the irrapper a bong-fide acknowledgment of our reception of their funds.

NEW PAMPHLETS IN GERMAN.—We have just issued a revised edition of our pamphleto f Instructions to Insentors, containing a digest of the fees required under the new Patent Law, &c., printed in the German language, which persons can have gratis upon application at this office. Address MUNN & OO.,

No. 37 Park-row, New York.

Binding the "Scientific American."

It is important that all works of reference should be well bound. The Scientific American being the only publication in the country which records the doings of the United States Patent Office, it is preparved by a large class of its patrons, lawyers and others, for reference some complaints have been made that our past mode of binding in clothis not serviceable, and a wish has been expressed that we would adopt the style of binding used on the old series, i.e., heavy board sides covered with marble pager. and moreor backs and corners.

sides covered with marble paper, and morocco backs and corners.

Believing that the latter style of binding will better please a large portion of our readers, we commenced on the expiration of Volume VII. to bind the sheets sent to us for the purpose in heavy board sides covered with marble paper and leather backs and corners.

board sides, covered with marble paper and leather backs and corners.

The price of binding in the above style is 75 cents. We shall be unable hereafter to furnish covers to the trade, but will be happy t receive orders for binding at the publication office, No. 37 Pa Row, New York.