combination of those cocks, or their equivalent, with the channels and the stacks, or with the stacks directly. Third, I claim the equalizer.

Third, I claim the equalizer.
Fourth, I claim the combination of the splash pump with the cisterns by pipes and valves, substantially as above.
Fifth, I claim the combination of an air pump with a tightly covered vessel or vessels, to draw air from the vessels and contents during freezing, by interventing pipes or connections.
Sixth, I claim the peculiar mode of connecting the stacks with the channels, and channels with the cocks, or other-pieces, as shown and described.

3,915 .- William Van Anden, of Poughkeepsie, N. Y., for

an Improvement in Harvesters:

Iclaim, first, The combination of the edjustable bolts, O O, with the adjustable bars, R, and with the main frame and axle, for the purpose and in the manner described.

Second, The combination and arrangement of the adjustable cutter barholder, U, and cutter, V, with the finger bar, E, substantially described, and for the purpose set forth.

bar holder, U, and cutter, V, with the inger bar, E, substantially described, and for the purpose set forth.

3,016.—J. H. Wells, of Brooklyn, N. Y., for an Improvement in Automatic Primer for Firearms:

Leiam, first, The combination with a firearm of a hopper and a slide or its equivalent, which is operated by the cocking and letting go the hammer of the gun, and by other manipulation of the arm to bring and deliver the priming pills to and at the point of explosion, said parabeling so constructed and arranged, as described, as to receive the said pills from the mass, without any previous arrangement in order being necessary, and to deliver them slidgle in succession, as sat forth.

Second, The combination of the slide, 4, vibrating arm or catch, 7, or other catch performing its functions, catch, 8, and spring, 10, substantially as described for the purpose of attaching the slide to and detaching it from the hammer, so as to make it operative, or otherwise, as desired, for the purpose set forth.

Third, The construction, as described, of the chamber or reservoir or coattaining the pills or p iming material in two compartments so formed and arranged with reference to each other that the smaller compartment of the one which is over the opening in the slide, will receive the pills freely from the other compartments, and have a tendency to retain them, substantially as set forth.

3,017.—John Wilson, of Chicago, Ill., for an Improved

,017.—John Wilson, of Chicago, Ill., for an Improved
Manufacture of Fibrous Waterproof Fabrics:

a waterproof fabric, having both surfaces capable of securing a cluth finish.

3,018.—Joseph Wood, of Red Bank, N. J., for Improvement in Frogs for Railroads:

I claim the combination of rails, h and l, connected together and probable from the rails, e and b, with the frogpoint, n, in the manner and for the purposes specified.

her and for the purposes specified.

3,019.—James S. Yerk and G. H. Heming, of Tiffin, Ohio, for Improvement in Bridges:
I claim, first, The use of longitudinally-described tubes in the construction of trues frames, substantially as described.

Second, Casting or mobiling the panels of trues frames in longitudinal sections, each section embracing half of the upper chord and cross braces, and a portion of the shoe or heel post, as set forth.

Third, The manner above described of connecting the sections of one pauel to those of another in trues frames when the said connections embrace within themselves the shoes or heel posts, as stated.

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On appeal to Commissioner of Patents
On application for Re-lesue
On application for Extension of Patent
On granting the Extension
On filling Disclaimer
On Allag application for Design, three and a half years\$10
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description, we have a special search made at the United States Patent Office, and a report setting forth the pro pects of obtaining a Patent &c., made up and mailed to the Inventor, with a pamphlet, giving instructures for further proceedings. These preliminary examination are made through our Branch Office, corner of F and Seventh-streets Washington, by experienced and competent persons. More than 5.000 such examinations have been made through this office dur past threeyears. Address MUNN & CO., No. 37 Park-row, N. Y

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Every applicant for a Patent must furnish a model of his invention If susceptible of one; or if the invention is a chemical production, he nust 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 fe by express. The express charge should be prepaid. Small models fro a distance can often be sent cheaper by mail. The safest way to rem's money is by 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 Newsfork correspondents; but, it act convenient to do so, there is but little risk in sending bank bills by mall, having the letter registered by the pusimastar. Address MUNN & Co., No. 37 Park-row, New York.

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- F. R., of N. J.—We are not familiar with the terms upon which engineers are admitted into the revenue service of the co try. This branch of the services is under the direction of the etary of the Treasury, to whom we refer you.
- T. A. H., of Ill.-If you have any doubt about the practicability of your invention, the only way to settle it will be tual trial If you have not the means yourself, you must rself, you must try to get some one to aid you. Inventors frequently do this.
- J. H., of Mass.—We do not know the exact number of the present clerical force of the Patent Office. Business is conducted with considerable alacrity, but cases are not disposed of as rapidly as theyoughtto be.
- 'Improvement," of N. Y.—On page 113 of the last volume you will find an lilustration of the machine used in rifling can for the United States army. It is as simple and efficient as any that we have seen describe
- A. W. B.—Asks the following questions :—" Suppose that A obtained Letters Patent on improvements in corn planters claiming 'check-rowing corn by means of the dropping slides' &c., to do which, at every cross mark he raised or depressed the handles; and five months subsequent to that, B patented improvements on the same kind of machinery. Several y after that B reissues, and then claims 'operating the seed dropping mechanism by hand or by an attendant in contradistinction to automatic dropping,' at the same time ante-dating six months, does B's re-issue and ante-dating prevent A from anie-dating and re-issuing now?' Ans.—No. "Is not B's claim referred to, invalid? Ans.—Yes, unless he was really the prior inventor. "Could not A secure same claim now by showing the originality of invention?" Ans.—Probably he could. "Are not antedated claims inoperative as against other claims patented within the time covered by the ante-dated claim?" Ans.—Not nec essarily. It depends on whether or not the ante-dator was in fact the essarily. It depends on whether or not see that and additional to the prior in ventor. "In re-issues are the new claims additional to the invention?" original ones, or are they the only claims then, on the inve Ans.-Sometimes the re-issued patent contains the original claims with new ones added, and sometimes the claims are all new. "Can an original inventor preventa subsequent inventor from ma ing his invention, if an infringement, however trifling that infringet may be, and thereby monopolize the whole to the public detrient, or can the subsequent inventor, by offering or paying proper tariffs, manufacture and sell against the willof the original inventor?" Marins, manufacture and seif against the whole and segment. The exclusive privilege of sale or use belongs to the patentee. "By such monopoly all subsequentimprovements, involving any infringement of original patents, however trifling the infringement, are lost to the inventor and public, if the first inventor objects to their use by others; whilst, if for a fair compensation, he would grant to others the right to use, he, they and the public would be alike benefited." Ans .- We have yetto see the first inventor who was unwilling to receive compensation for the right to use his improvement.
 thelawallows such exclusive monopoly it is wrong, because all nopoly it is wrong, because all subsequent improvements are at the mercy of the original inventor, and inventors become discouraged because their own inventions become uscless in their hands after being patented." Ans.—Practical experience shows that your viewis wrong, and the law right,
- O. B., of Ohio, asks the following questions:-"From among the weil known principles of mechanism, as for instance the gearwheel, the crank, the spring, the joint, the pinion, &c., can any one, by applying these to new and useful uses in machinery, he said to have invented anything but an arrangement or combination?" Ans.—Yes. Something more than a mere arrangement might, under certain circumstances, be claimed. "Can a motion, simply considered be a patentable idea, or must a patent attach to some-thing material, or pertain to the device that causes motion?" Ans.— It depends upon the result produced by the motion. "If motion In itself is not patentable, then can a similar motion be produced but by a different device, without infringement upon a former patent, provided always, it is useful, and a better arrangement than the former?" Ans.—If the claim rested upon the production of a mo-ion in a given way, and some other mechanism produced it in a different way the use of the latter machine would not be an infrings.
- P. H. W., of N. Y.—You can obtain all the information you require about the picking machines by addressing a letter to the Lowell Machine Works, Mass,
- H. G., of Mo.—There was never a more favorable time for you to apply for a patent, and to bring your invention before the pub-iic than the present. The administration of the Patent Office is liberalin its construction of what is patentable. Patents were granted in 1848, must be extended in 1862 if demanded. Patenta which
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- E. A. S., of N. Y .- Your idea that the ocean in its deepest parts reaches to the liquid interior of the earth we do not regard as
- A. J. B., o Colorado Ter.—The patentees of the alloy for making dies and stamps, described on page 236, Vol. V. new series SCIENTIFIC AMERICAN, can give you all the information you desire ting its nature and composition.
- C. A. H., of Ill.—We are not acquainted with any sub-stance or composition but india rubber that is capable of rendering muslin water-proof, elastic, and capable of withstanding the heat of without becoming sticky. The discovery of a new cheap ad of this character capable of being applied in solution would be invaluable and could not be purchased for a hundred times the sum (\$30) you have offered for it,

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Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Paten office from Dec. 24 to Wednesday Jan. 1 1862:—
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NEW YORK OBSERVER FOR 1862.—IN ASKING the aid of all who may desire to extend the circulation of the New York Observer, it is proper for us to state distinctly the position it ecupies with reference to the present condition of public affairs in our beloved country.

Having always mamtained the duty of good citizens in all parts of the land to stand by the Constitution, in its spirit and letter, when that Constitution was assailed and its overthrow attempted, we accordingly at once gave a cordial support to the Government in its patriotic endeavor to assert its lawful authority over the whole land. Belleving secession to be rebellion, and when attempted, as in this case, without adequate reasons, to be the highest crime, we hold

1. That the war was forced upon us by the unjustifiable rebellion of

2. That the Government, sathe ordinance of God, must put do rebellion and uphold the Gondifuction in its integrity.

3. That every chizen is bound to support the Government un which he lives, lathe struggle to reëstablish its authority over

3. That every chizen is bound to support the Government under which he lives, in the struggle to resistable its authority over the whole country.

4. That the Constitution of the United States is the supreme law of the Government as well as of the people; that the war should be prosecuted solely to uphold the Constitution and instricts obordination to its provisions: and the war should be arrested, and peace concluded, just so soon as the people now in revolt will lay down their arms and submit to the Constitution and laws of the land.

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