## Scientific Ammerican.

## TO CORRESPONDENTS

Those of our subscribers who have duplicate copies of
of No. 6, 12, 15, and 17 present volume, will oblige us by forwarding them to this office.
J.G.C., of D. C.-It is no doubt very dessirable to em-
ploy some substitute for cast ron in the manufacture of artillery. so as to obviate the immense weight necessary to
render them sufficiently strong, and at the sametime to render them suffcienthy strong, and and that cast-iron
insure greater strength. It has been found guns have given way after a very limited number of shots,
and thus need frequently to be replaced. In a 72 -pounder the pressure of the explosion is about 72 tunsto the square inch, which is ten times the force of the tensile resistance
of a square inch of the metal ; a patent, however, could
not be obtained for substitutingone metal for another, such not
as steel for cast iron.
A. T., of Montreal-The fact of portrait painters mak
ing such back grounds, would prevent their application ing such back grounds, would prevent the ir application
to daguerreotypes being a proper subject for a patent. Youdo not say how they are to be produced. It is quite
probab.e that there may be something new and patentable in your manner of producing them.
E. P., of Union Point-If you will
residence in full, we shall be happy to send you one of our circulars relating to patent business. When you
write please to repeat your requests, in orler that we may write please to repeat your requests, in orlier that we may
know what you want. You will bear in mind that there are several Union Points in this country.
Messrs. Speed \& Bailey, patentees of the
will learn somethingto their interest by calling at this. office.
G. M G. McD.. of Vt.-In our Fair notices we gave the ad
dress of chines, at No. 24 William st. We do not know where else he can be found. If he would adrertise his machinery in the Scl. An., it would pay him fifty times as much
as he would make out of its exhibition at the Crystal Pal ace. We have had numerous inquiries for his machines the address of inventors when noticing their inventions. the address of inventors when noticing their inventions.
for the reason thatthey do not wish to advertise gratui
tously. This is the right of the publisher, yet we never tously. This is the right of the publisher, yet we never
hesitate to give the fullest benefitto inventors in our colhesitate to give tha fullest bene fitto inventors in our col
umns, and our gratuitous notices are productive of vast benefit to those who are thus favored. We have no selfish but we are very sure that the $\mathrm{Scl}$. Am... with its immenie
circulation, is thebestadvertising medium in the world circulation, is thebestadvertising medium in the world
for inventors and patentees to adopt in disposing of rights
and machines.
W. H. N., of Ct.-Yours is not a perpetual motion, as understood, any more than a wind or a tido mill. You give motion to a mill by the expansion and contraction
of mercury, caused by the changes of atmospheric tem perature, which
flow of the tides.
J. C. M., ofPa.-Correspondents who write to us for inCormation without signing their names, are not entitled to
any attention. It is our rule not to notice their inquiries but as you are evidently ignorant on this point, we will
answer you by referring you to Logan \& Lidgerwood. No. answer you by referring you to Logan \& Lidgerwood. No.
9 Gold st., N. Y. They sell good wrenches, but we do not know their price per dozen. A. W. H., of Mo.-It would be impossible to get a per
son with capital to engage in the business to which $y$ ou ble. \& G., of N. Y.-We will have something to say about water of the Scr. AM. subject
G. B. Mc D., of K y . - Pistons have been applied in many forms for steam gauges, and there is nothing essentially
new in your arrangment to entitle you to a patent. new in your arrangment to entitle you to a patent.
D. G. Mills, of Gulf Prairie. Texas, wishes to procure a good machine for cutting ditches about 21.2 eet wide at the top, 18 inches at the bottom, and 21.2 feet deep.
Timothy Riggin, and Gerard Sickles, of Brocklyn, H. W. Adams, of this city, and W. H. Wood, of Jersey City. will please to call at this off
L. B. M.., of Pa--lf you will look over the back files of the Scr. Am., and inform us what numbers you want we
will send them if we have them on hand. We do notremember of any numbers which contain such illustrations
as you want and it would take up a good deal of our time in looklng them up.
J. F. G.. of N. Y.-We believe the objection to the lo
wheel is that it tends to throw the cars off the track. W wheel is that it tends to throw the cars of the track. We
think it has been tried on the Erie Road. You had better inquire of McCallum the Superindent.
J. L., of C. W.-We do not perceive any novelty in
your plan for ventilating railroad cars. It is not new. and we advise you to abandon it.
F. E. J., of Ma is.-The idea of putting a strip of india
rubber under railroad rails, to obviate noise and jarring is not new. We noticed the same thing in the Scr. Am some time ago.
E. WV. F of
E. W. F., of La.-We were much amused with your
description of the spiking and sinking of the cypress log. description of the spiking and sinking of the cypress log.
We have sent you the information desired respecting the Woodworth Patent.
W. B.. of -You wish to know the velocity of falling
water, at th various hights from five to ten feet. It falls water, at $t h$ various hights from five to ten feet. It falls
four feet in half a asecond; five feet in 5557 of a second six feet in 656 of a second ; eight feet in $\cdot 706$ of a second
nine feet in 75 of a second; and ten feet in 79 of a second. nine fect in 75 of a second ${ }^{\text {a and ten feet in } 79 \text { of a second }}$,
In conducting the water down through a shute, it is esti mated that the resistance to the above velocity. which is
that of falling bodies, in free space, is equal to a little that of falling bodies, in free space, is equal to a little
over twenty-six per cent.
D. C.. of Ct.-We may not be able to discover where D. C.. of Ct.-We may not be able to discover where
the deception of the perpetual motion is confined, but the deception of the perpetual motion is connined, bu
certainly no machine can set and keep itself in motion according to the known laws of mechanics.
H. H., of Mass.- The journal to which
H. H., of Mass. - The journal to which you
monthy. It is a very respectable publication.
J. C. D., of Newark-Your alleged substitute for a crank has been carefully examined. Its arrangemen
differs from any other with which we are acquainted, yet we do not see any thing in it that betokens success.-
We think it would be valueless except perhaps on ver small engines.
V: your caveat, butif the Commissioner does not acknow him again. $\$ 3$ received, will send you a bound volume.
o, A., of Ind.-Not a copy of the People's Jourral is to
be had.
W. T. Boyer \& Bro.. Harrisburg, $\mathrm{Pa}-\mathrm{Wish}$ to procure machine for breaking copper ore. J. E. S. of N. Y.-Address John Jones, Clyde, N. Y.
or information about mechanical typographer. W. K.. of $\mathbf{K y}$.-Please send your model as soon as con
venient, and we will give prompt attention to the prepa ation of your case.
Moneyreceived at the Scientific Amprican Offce on account of Patent Office business for the week ending
Saturday, Jan. 23, 1856:W. \& B., of Me., $\$ 25$; I. A. H., of Mass., $\$ 10$; W. S., of
Iowa. $\$ 30$; P. D. M. C., of N. Y., $\$ 33$ M \$55; A.E.C., of Pa.., $\$ 22$; H. \& \& B., of N. Y., \$. $\$ 55$; B. F


 of N.J., \$20: J.III., of Mo.. $\$ 30 ;$ A. C. K... of N.
W.H.W., of N. J., $\$ 12$; E. G., of Mass., $\$ 55$.
Specifications and drawings belonging to parties with
the following initials have been forwarded to the Patent the following initials have been forwarded to the Paten
Office during the week ending Saturday, Jan. 25 :-
W. \& B, of M : W. \& B., of Me.; W. W., of La. ; B. F.F., of Pa.;
F. L., of Pa. ; F.V., of Nich.; C. W.C.. of N. Y F.L., of Pa.; F.V.".of Nich.; ; C. W.C.. of N. Y.; ;
G., of Mass.; R. T. S., of Geo. ; S. T., of Ind.; W.I.W.,
of N. J.; A. F. \& C. M. H. W., of N. Y.; H. \& B., of N Y.; H.J. J., of Me.; ;TMcB., of N. Y.; ; J. M B., of N
Y., W.M.B., of Del.; A.C. K., of N.Y.

## Important Items.

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gcribers remit their money by mail, they may consider the arrival of the first paper a bona fide acknowledg. ment of the receipt of their funds.
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ing 75 cents.


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#### Abstract

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