## Sirientific Anmerican.

TO CORRESPONDENTS.
I. C., of N. Y.-The proposition you suggest to us, to
publish a volume embracing engravings and descriptions publish a volume embracing engravings and descriptions
of all the machines that have appeared in the ScI. Am. since its commencement, could not be carried out without
a vast expenditure of money. In proportion to the vas number of engravings that have been published, we have
but a small portion of them on hand ; besides this objection, a work containing them all would be very large and J.G., of Ind J. G., of Ind.-Iron is chilled by being cast in iron
mold $s$; the chilling is caused by the surface being rapidly cooled-made into hard steel; the outside of the mold
must be kept cool with water. The person who sold you the receipt described for preventing scale in steam boil-
ers, obtained it from our columns. The water of the N i . ers, obtained it from our columns. The water of the Ni.
agara river will yet no doubt be used very extensively agara river will
near the Falls.
Robert Barber. of Bridgewater, N. J., wishes to obtain
he address of Messrs. Sandford \& Wakefield, who have patents on corn planters.
S. B. W., of Mass -We
S. B. W., of Mass - We are not aware of the existence
of any journal in this country devoted to gas lighting. Mr. Barlow, of London, publishes a journal on gas lighting, which, we believe, is very good,
J. M., of Cal. The information you wint
J. M., of Cal.-The information you want about tallow
candles is scattered through various publications and cancandles is scattered through various publications and can-
n be furnished as you want it. You had much better
detail to us as briefly as possible the result of your experiments and we will examine and give our opinion in regard R.D. B., of Nova Scotia-The sketch of your alleged
improvements in rotary steam engines has been carefully improvements in rotary steam engines has been carefully
considered : we do not discover much novelty in it, and should consider an application for a patent as unwise. It
does not possess, in our opinion, any advanta es over oth. er plans which have been abandoned as impracticable.
.J. H., of Pa. $-A$ pistol ball should penetrate further into a plank at one-sixteenth of an inch distant than into one
at twenty yardsdistant. J. S., Jr., of Mass.- Blanchard's claim is a peculiar one,
but it doe but it does if the pattern and article to be turned rotate.
We are of opinion you cannot get a machine equal to the We are of opinion you cannot get a machine equal to the Blanchard lathe for turning axe handles,
We have foreign patents belonging to the following per-
sons, which they will please to order, directing us, at the Ephraim Brown ; J. W. Hoard ; William Elliott ; G.H. Talbot : Caleb Winegar; L. W. Boynton ; J. C. Day ; A. E. Burnside, and Ferdinand Davidson.
G. P., of Montreal-We have no information about Mr.
Wilmot's apparatus in addition to what is published in the last Vol. of the Scr. Am. We have not heard that he has
as yet done anything with it. We cannot answer your in. as
quiry about cutting wood.
J.L., of
J.L.. of Pa.-The Minie rifle loads at the muzzle :
there is no peculiarity in the breech. Your subscription there is no peculiarity
expires with No. 19 .
culator" was published in 1843, by Sumner \& Goodman culator was published in 184, by
of Hartford, Ct. For sale by Blackie \& Sons.
J. F. N., of N.C.-You will not be able to find a work
on"cotton manufacturing which embraces the latest and on"cotton manufacturing which embraces the latest and
best improvements employed in the business. H. K., and Son, of Ohio-We cannot give you any in-
formation in addition to what is contained in the articles to which you refer. We would be very glad to do so if it
were possible. were possible.
U. B. V., of Pa
U. B. . ., of Pa.-Your ideas in regard to ruling bank
bills so as to prevent their alteration are new so far as we bills so as to prevent their alteration are new so far as we
know, and appear to be very good. We do not think
there is any chance, however. for a patent upon the sys. tem.
S. S., of N. Y.-In the construction of journals you propose to dispense with the cotton waste, andemploy in
stead a roller placed underneath the journal, and in con stead a roller placed undernea th the journal, and in con
tact with it, for carrying up the oil. This device is not new. The same thing essentially has been presented to us. former occasions.
C. C., of Pa, - We hav
of your trip hammer improvement. Send us on a model at once.
J. C., of Florida-A machine for turning wooden bowls
was patented in 1850, by Addison Everett, of Middlefield, Mass., an engraving of which appeared in No. 52 . Vol. 5 ,
Scr. Am. We are unable to give you any information in respect to its operation or cost of the machine. IW
advise you to address Mr. Everett on the subject. that suits your wishes.
H. C., of N. Y.. \& T. J. L., of Pa.-If you will reter to the history of Propellers and Steam Navication published in the Scr. Am. You will find illustrations of endless
chain propellers. This invention is very ancient, and chain propellers. This invention is very ancient, and
possesses no advantages in comparison with the plan in cos.
common use. $N$. Y.-It would not be new to construct a
mowing machine having two sets of knives cutting in opmowing machine having two sets of knives cutting in op-
posite directions. We have seen machines having knives
operating in this manner. operating in this manner.
F. F. G.,of Texas-Short stroke engines are used in saw
mills, \&c., because they are compact, and givea quick mills, \&c., because they are compact, and givea quick
direct rotary motion to the main shaft. The flues of a
boiler should never be carried above the water line. The boiler should never be carried above the water line. The
boiler, however, may be enclosed with brick a s safely as
with felt The most cautiovs engineers ara sametime boiler, however, may be enclosed with brick as safely as
with felt. The most cautious engineers are sometimes
guilty of neglect, and this may have been the case with withfelt. The most cautious engineers are sometimes
guilty of neglect, and this may have been the case with
the ona to which you allude, who had charge of the ex. the one to whic
ploded boiler.
H. S., of Va.-Ure's Dictionary of Arts will give you
the necessary information about making chlorine gas. You can obtain a patent on the new article of manufacture D. T. O.. of N. Y.-The long pitman is subject togreater
vibration than a short one, and is more liable to heat on vibration than a short one, and is more liable to heat on
that account. We cannotgive you a rule for calculating the exact length of pitman in your cas
Y. N., of N. Y.-Every bullet in passing through a ri.
fle barrel is feathered by the grooves, the barrel perform. fle barrel is feathered by the grooves, the barrel perform-
ing the office of a swedge. It might prevent the leading ing the ofice of a swedge. It might prevent the leading
up of the grooves to swedge the bullets of breech-loading rifes. If cartridges are well made and
will be kept pretty well lubricated.
R. R. W., of Pa.-If the wheel had a throat and pas.
sage to allowall the water to flow through it freely it sage to allow all the water to flow through it freely, it
would not move, the water would simply flow through it would not move, the water would simply flow through it
Your wheel will be of the same power, whether large or small-the fall and quantity of water being the same.
Your turbine having a sir foot head, and openingshaving small-the fall and quantity of water being the same.
Your turbine having asir foot head, and openingshaving
an area of 600 inches, will be about ten-horse power
S. E.H., of Ohio-We have never published a descrip.
tion of the brake you refer to. By addressing the invent. or in this city you can no doubt procure a descriptive cir. cular.
Moneyreceived atthe ScIENTIFIC AM ERICAN,Office on
account of Patent Office business for the weel
Saturday, Dec. 29,1855 :-
W.P.. of Ct. $\$ 25$; E. S., of N. Y.. $\$ 55$; L, R., of N. Y




 J. W., of Mich.,\$27.

Specifications and drawings belonging to parties with Office during the week ending Saturday, Dec. 29 :C. H. W., of R. I. ; R. W., of Ct. ; W. P., of Ct.; E. H.,
of N.Y.; W. \& G.B.., of Pa.; J. L. I.; E.S., of N. Y.; J.P.S., ofTex.; J.McC., ofMich.;

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bility: by Pliny Miles. This is one of the most cleat









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