## gicmific american.

## TO CORRESPONDENTS.

I. M. C., of C. W.-A steam pump of the descrip-
tion you speak of, and with its qualities, is desirable but the only true test of its effective economy is ex periment. It is not possible to tell how it will work without a trial, for that would be predicating a $r$ sult upon an unknown theory.
J. A. D., of Fla.-We
J. A. D., of Fla.-We cannot consent to do any
such thing, we have learned the folly such thing, we have learned the folly of believing
that such advice is rendered from disinterested tives. issued to A. N. Henderson; but it is for a differen purpose. There are numerous patents in this coun try for setting logs, called "sslf-setting," and we
presume some are in use. We have heard of no depresume some are in use. We have heard of no de-
mand for such inventions of late. The extra charge on the "Sci. Am." is for Canada postage. S. H., of Mass.-As soon as a final determination
is made in your case we shall advise is made in your case we shall advise you. No alte- :
rations can now be made in the model under the rations can now be made in the model under the
same fee. If you wish to alter it, the present case must be withdrawn and a new application filed in M. R., of Me.-You have entirely overlooked one fact, that is, "velocity;" surface pressure is not the only calculation to be made; the velocity and pressure must enter into computation. The same principle as jours was embraced in the Air Engine of Savery. The low pressure condensing engine meets
more than the conditions set forth in your sketch. more than the conditions set forth in your sketch.
We shall let you have something on steam power in We shall let you
a future number
C. B., of Ohio-The method you suggest for ventilating railroad cars has been before proposed; $\mathbf{~ w ~}$
doubt its patentability, as substantially the same plan has been secured to a Mr. Heckrote, of Mary land.
P.S, of N.B.-There are no patents in the name Hargus or Kendal, for candle making. We
they have no patents for their processes.
M. W. S., of Mass. -The keeping of the stone wet isgnot the dificulty at all, nor was that mentioned
to be the difficulty, for it would not answer to keep to be the difficulty, for it would not answer to keep the stone always wet; the
see, could not be applied.
see, could not be applied.
W. R., of R. I.-The engravings of your patent door will be inserted in our next number.
J. T. P., of Mass.-Your papers have been ed to the Patent Office, and you may look for the is sue in about two months.
H. W. C., of Mass.-Your diagrams are in the hand of the engraver, and will be done this week. S. L., of Maine.-To build a vault cheap and fireproof, make the walls of rough stone, plastered with fire-proof cement, and make the roof of iron, with Hyatt's lights. It can be built cheaper, but not tru-
ly fire-proof. Wood can be rendered partially firely fire-proof. Wood can be rendered partially fire-
proof by steeping it in alum. proof by steeping it in alum.
W P., of Mich.-The centrif
does not affect the waters of any river, any more does not affect the waters of any river, any more
than the motion of the earth on its axis affects the motion of our bodies. We do not see any good or useful result to be obtained from the discussion of
the Mississippi question; its waters run down an inthe Mississippi question; its waters run down an in-
clined plane, in the. common-sense view of the quesclined plane, in the. common-sense view of the que
M. K., of Mass.-Your ideas about ventilating cars is not new; the same proposition is advanced in the
notice of Law's invention found on page 340 , this notice of Law's invention found on page 340, this
volume Sci. Am.; it has often been submitted as the volume Sci. Am.; it has often been submitted as the
best plan for the purpose. The numbers we have sent, with the exception of an index of Vol 2 , none was ever published.
C. W. G.. of Mass.-We have now a drawing in our
, possension embracing the same device for ventila-
ting cars, as is proposed by you. It could not be patented.
Mechanics' Institute, Ohio-A railroad car brake, under the entire control of the engineer, and operated upon by steam, was projected some years ago by Robert Stephenson, of England. Several different plans have been proposed since his invention, but
none of them have put into use. There are some seem.
J. H., of Ohio-The subject of car ventilation is
now attracting much attention, and it is inkely some now attracting much attention, and it is likely some
good may result from it. For the benefit of yoursel and many others, we deem it proper to state that trunks with bell-mouths, for taking in air, and wind
tubes passing over or under trains, to receive air, either by a funnel-shaped mouth or by the applica tion of a blower, are old and well known. We se nothing new in yours, in fact it will not work well,
because dust and smoke will get in. Hamilton's and Paine's arrangements of windows embrace the principle designated by you.
V. P. K., of N. Y.-Wherein do you gain anythin over the plan represented by Mr. Paine? The idea appears to be
J. W. Stuart, of Plattville, Wis., wishes informa tion in regard to presses and grinders for manufact ring linseed oil. We are unable to answer his inquiries; perhaps some of our readers may. ood one, and we request you to send us a small del and description of it.
J. F. H., of N. Y. The law will allow you to take
a patent a patent for your own invention, because none but
the original inventor can make application. We think the mode of temperingsprings is generally understood. Ballooning is of doubtful importance as a means of conveyance. Many have
same train of reasoning with yourself.
I. I of $\mathrm{Pa}-\mathrm{We}$ are engaged in th.

## G. H., of Albany-In 1782, the Marquis De Joffrie, onstructed a steamboat at Lyons, France, and em

 constructed a steamboat at lyons, France, and em essful. In 1826, this invention was revived by a M Palmer, of the Royal Mint. The invention is oland well known, and has been condemned for some ause. We cannot enumerate the number of times
his invention has been submitted to us. A proposition to use it on our canals was made three years ago but without success.
ed File of Ohio-We have examined your impro ave never Documents, and think it new. We egard it as useful. Whether the Office would issu atent should be granted
H. \& R, of N. H.-If you wish an engraving pub ished, please send by express the Letters Patent, an turned.
E. G. F., of Halifax-We regret that we are unaand know of no person to whom we can Mr. Potts, W. C., of Me.-A patent was issued on the 19th of ugust last for a Register for omnibus drivers ; yo D. B., of N. J.-So far as the 398 Vol. 6, Sci. Am.
D. D. B., of N.J.-So far as the passing of the heated
products into the boiler is concerned, we have to y, that the plan has been proposed to us before application. The heated products is carbonic acid gas, and the pressure of this gas must always exceed ye pressnre in the boiler. We also do not see how
you will bo able to make the fire draw when the water becomes as hot as the product which heats it. Money received on account of Patent Office bu
 of Ga.,' $\$ 65$; C. \& B., of N. Y.. $\$ 20$.
Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Omice during the week ending Saturday
July 31 : E. S., Jr., of Ct.; C.P., of N. Y.; M. R., of Me.
D.; of N. Y.; J. W., of Pa.; B. \& B., of Ct.

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