## fivectiv

R. H., of Pa.-Smoke-burning locomotives are common in England, where bituminous coal is employed, but such are not re quired where anthracite is used for fuel. The common principle of consuming their smoke is to admit warm air through a bridge-wal at the back of the fire-box. The warm air mingles with the smoke and supplies it with the requisite amount of oxygen. Another method consists in supplying the warm air through a perforated urnace door, behind which is a box forming part of the door, wher $t$ is heated and passes in streamiets through holes to the ffre. You moke-consuming locomotive in a coal mine, because it will ume so much air and geerate so much carbonic acid was to render the mine unendurable to the miners.
T. J. R., of Ohio.-Sound is produced by the vibrations of the atmosphere, and the conved to the min through the nerves of the auditory organ. It is waste of time to dispute the question whether sound exists independent of the sense of he
that sense.
C. C., of D. C. -What is meant by stating that " aniline exists in coal oil" refers only to the crude product of coal distilled ually true benzole does not exist, so far as we have ascertained, in petroleum
W. M. M., of Wis.-We have no copies of No. 1, Vol. V (new series) of the Scientific American.
C. C. P., of Ohio.-You have not clearly expressed what information you desire to obtain respecting jour copper tubes, o we should have cheertully given t.
Walter Brown, of La Crosse, Wis., wishes to purchase machine for making round matches
C. E. L., of Mo.-We cannot decide upon your articles natil we see them. The subject is rather hackneyed, but you may
G. W. H., of N. Y.-Several patents have been granted for machines capable of sawing two sides-of a tapering marble ican you will find the claims.
C. S. M., of Mass.--A machine for turning off grindstones and keeping them true, while in use, was patented on June 5,1860 , and illustrated in Vol. VI (uew series), No. 32, on page 376 of the Scientific American, by George C. Howard, of Philadelphia. Ad dress him for further information at No. 15, South Eighteent street, Phiadelphia. It is said to be an excellent machine
D. E., of N. Y.-We think but few of our readers would be interested in the subject of lenses, or the difference between one kind and another
C. C. S., of Mass.-You will find an illustrated description of Dr. Page's electro-magnetic engine on pages 65 and 68, Vol. VII. (old series) of the Scientific American. There is no manufactory trical apparatus will make you one to order
J. H. M., of Mass.-We have answered this question so many times that we must refer you to Vol. VII (new series), No. 12, page 187, of the Scientific American for a full account of the way n which engineers are appointed to the navy.
A. J. C., of Ohio.-We think your case is in the hands of reliable men. That class of claims in which yours is ranked has
not yet received attentim from the Government. and it is impossinot yet received attentim from the Government. and it is impossi be attended to. They staie that they have severa! similar cases and are urging their consideration at the hands of the Goyernment as much as they can. We sympathize with your misiortunes, but have patience and you will doubtless be rewarded.
F. G. M., of Mich.-We advise you to procure a steam engine by all means. There are no caloric engines in the market of the size and power you want, or that would at all sutt your pur ferable to the cheap horizontal engines sometimes offered for sale.
W. T., of N. Y.-We are not in possession of the displacement of the steamers City of Baltinore or Merrimac, nor yet thei relative borse-power. The paragraph in question was copied from a daily journal. The subject is important, as you say, but we do not thiuk that the requisite information could be obtained, espec: ally the details of the construction of the City of Baltimore, by in aerting your letter. The Mmimac's superiow doubtless lies in her model, and it is a notorions fact that, notwithstanding the "lne and cry" made in the daily papers abont our slow steamers, we have vessels capable of outrunning the English ships, when they are in proper order. A steamer on blockade duty is hardly in a fit hers, cabout which so much is said, have been caught and made

## Money Feceived

At the Scientific American Office, on account of Patent Otice Lusiness, from Wednesday, Jume 3 , to Wednesday, June 10 1863:--
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