## Hotesfyquyivo

J. C. W., of IIl. - There are no obstacles to steam en ginestaking the place of horses for hauling on common roads, except the greater cost for machinery and expense in working. It is held as an opinion by several who have investigated the subject, that on almost any road which will pay for the expense and operaon of a steam engine, a greater gain will ultimately be secured by lasing down a track of rails. On any road well-paved with mooth blockg, we believe that a hauling steam engine could be Perated with succesa.
P. A. W., of La. - Silver which is deposited on copper by the galvanic cuirent simply adheres by the force of electrical affinity to the surface, and docs not enter the pores of the Imeta like fire-plated silver. In soldering electro-plated copper or tin plates, the silver is liable to blistcr, because its heat-conducting power is different from the metal on which it is depraited. There is no way known to us for preventing this. If you should discover some
J. O. G., of Mo.-The best black paint which you can use for engines is composed of boiled linseed oil and lampblack. Afer a coat of it has become perfectly dry on the metal, then put a coat of black asphalt varnish on the top of it, and a fine glossy surface will be obtained.
J. M., of Ill.-The best paint which you can nse for a brick house, to prevent damp from etriking through, is some mineral pigment of the color most suitable to your taste, mixed with good linseed oil. It is the oil, and not the pigment, which forms the protective coating. We have never seen a whitewaeh that would not ultimately come off with rain; but if you mir some kim or sweet milk, salt and a an: 11 quantity of molasses with lime whitewash (when cold), it will be rendered more durable than
Jhen ured in the conmon manner.
J. P. L., of Va.-In Belgian coal mines, and some mines in England, as well as one or two in Pennsylvania, fans are mplosed for ventilating. You will find an art cle containing the description of a faninan English mine on page 235, Vol. XII. (old series), Sctentific Axerican. Also, the description of a fan employed in a coal mine at Phoenirville, Pa., on page 267 of the samo volume.
F. J. L., of Conn.-The statement to which you refer, regarding deodorized alcohol, was made at the meeting of the Polytechnic Association, and so reported in our colnmns. All crude . D. Wiquors ma be pur fied by ditration through harcoal.
 have heard of a ritle doing good execution at 1,100 yards. T leaves of the rhubarb plant are not poisonous, so far as we know. A. P. C., of N. Y.-There is no power lost by the crank in a oteam engine. You will find this snbjectillustrated and Also, on page 99 of the same volume
Er T. A., of Ohio.-The shining yellow particles which sou send usare mica, which may be known by its splittling into very thin scales.
C. T. M., of S. C.-The strings of yonr guitar, though called "catgut," are really made from the intestines of sheep, It is said that the "purring pussy"makes all her music before she dies. Why this article should have been called "catgut" has puzzled natiquarians to find out.
F. B., of N. Y.-"All the points in the perimeter of a wagon wheel rolling over a plane" do not " move with the same rapidity, at the same time."
R. C. B., of Ill.-Your article is received and will soon
G. H., of Miss.-Your beer seed is being examined.
J. M. L., of Ind.-The substance which you send us is sand, composed of the ingredients of granite-mica, quartz and feldspar
W. \& S., of Va.-Viarious opinions are expressed in regard to the extentof surface which a lightning rod will protect. The rule has been laid down that it is a circle, the radius of which is equal to the square of the hight of the rod. We have never seen any account of experiments proving the correctuess of this tatement, and we have no idea that it has ever been determined. Probably it would vary with circnmstances. We should venture the oplnion, though not very confidently, that in the case which
you oite there are points enough.
pou cite there are points enough.
B. F. H., of Ohio.-Several plans are in use for consuming the amoke of furusces, and, in England, there is a penalty attached to the eacape of amoke from all manufactories, so that it mast be consnmed inall the furnaces of that country. By consuming the smoke of furnaces, a nuisance is abated and a considerable saving of fael is effected. The common plan of buraing, is to pass over a highly-heated surface, and oo provide a sumcient quan tity of warm air for the perfect combnation of the carbon.
H. K., of Minn.-The velocity of a body falling one foot, near the surface of the earth, is at the rate of 8 feet per second ; but the velocity of water passing throngh a notch, under one fiot of head, ts only 5.1 feet per second. As the velocities of falling bodies are es the square roots of the hights, mnltiply the quare root of the hight of your fall by 5.1, and you will obtain the velocity of the water. Multiply this by the area of the opening, an square inches, and you will obtain the aumber of cabic laches of water which pass through in a second. As your weir-board is 2 aohes deep and 4 lacbee wide, only so over it per
2-neh fall.
C. C., of Texas.-You had better write to some scalemabar in thle dity for what you want. This is the best course for you to adopt. Addrees F. Ef Howe, Jr.; he can fninleh you with a cood reale.
J. C. H., of Cal.-We have no recent information to communicate in regard to Dr. Collyer's straw paper.
G. W. T., of Muss.-It will be very easy for you to find out whether large and small shot, in quantity, and bulk for bulk, are the heavier. Take a pint of each and weigh them. W. D., of Pa.-Your article is received, and is under examination.
J. A. J., of N. Y.-Oiled silk is manufactured by coating it with some quick-drying boiled oil, and drying it in a warm room. Two or three successive coats are sometimes put on, each being perfectly dried in succession.
J. P. S., of Ky.-You can get a copy of the drawing of Whitney's old gin from the Patent Office, we believe. It was patented in October, 1793.
S. S. R., of Tenn.-All the barrels of the best quality of double shot gnas thatwe have examined were made in Birmingham, Eaglana. You can obtain a copy of Dr. Maynard's patent nformation which you want. Percussion caps of getting at the made with fulminating mercury; aluo caps and powder are Copal varnish for the caps is made by dissolving roasted gum copal in boiling linseed oil. The fulminate of mercury is generally mixed with some niter and sulphur for percussion caps. Ericsson engines of 10 horse-power have been constructed : they are about as heavy as a steam engine, boiler and all, of the same power. Wel do not know where you can obtain the teeth or springs used in music bores.

## MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, June 2, 1860:J. N. J., of Maes., $\$ 25$; 1I. B., of IIl., $\$ 25$; T. C. H., of Ga., $\$ 20$; J. M., of N. Y., $\$ 90$; W. J. C., of Ga., $\$ 35$; J. S. L., of La, $\$ 25$; J.
L., of N. Y., $\$ 30 ;$ W. H. P., of Wis., $\$ 30 ;$ J. R. I.: of N. Y., $\$ 100$ W. H. D., of N. Y., $£ 30$; E. D. C., of Conn., $\$ 30$; Z. D., of Ga., $\$ 30$; R. S. W., of Ga., $\$ 35$; J. S., of Ga., $\$ 10:$ E. B. \& T. S. P., of N. Y. $\$ 30$; C. A. B., of Vt., $\$ 25$; H. P. C., of Mich., $\$ 40$; E. R., of N. 11 $\$ 55 ;$ T. F., of N. Y., $\$ 350$; J. H. B., of N. Y., $\$ 30$; E. K. H., of N. Y., $\$ 25$; A. P. T., of Ga., $\$ 20$; J. M. D., of IU., $\$ 25$; A. De W., o N. Y., $\$ 38$; D. \& M., of Va., $\$ 25$; S. B., of Ga, $\$ 23$; G. W. H., o
III., $\$ 30$; J. B. F., of Ohio, $\$ 30$; E. S. C., of Mass., $\$ 30$; H. C. F., of Va., $\$ 30$; F. J., of $111 ., \$ 75 ;$ J. H. H., of Pa, $\$ 30$; H. \& F ., of Pa .,
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of Ohio, $\$ 33$; C. T. P., of 1. of Ohio, $\$ 33$; C.T. P., of L. I., $\$ 65$; S. H., of Ind., $\$ 95$; E. G. P., of N. Y., $\$ 30 ;$ i. G., of Md., $\$ 235$; A. J., of N. H., $\$ 30 ;$ F. R., of N.
H., $\$ 55 ;$ W. S., of Mass, $\$ 25 ;$ L. J., of N. Y. $\$ 25$; G. J., of Ohir $\$ 15 ;$ J. D., of Mass., $\$: 0 ;$ T. H. Q.. of N. Y., $\$ 35$; W. D., of Pa.,
$\$ 25$; D. \& E., of III., $\$ 40 ;$ D. F. S. W., of Md., $\$ 30 ;$ L. 8. W., of Vt., $\$ 25$; R. \& B., of Pa., $\$ 30$; H. G. N., of N. Y., $\$ 35$; F. N., of N. Y., $\$ 30$, W. L., of Mas9n $\$ 935$ H. \& P., of N. J. $\$ 30$; O. \&\& L., of
N. Y., $\$ 30$; P. N. B., of N. Y., $\$ 75$; J. W. H., of IIl., $\$ 30$; W. G. S., N. Y., $\$ 30$; P. N. B., of N. Y., $\$ 75$; J. W. H., of IIl., $\$ 30$; W. G. S.,
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L., of Conn., $\$ 35$; S. P., of Canada, $\$ 37$; S. M., of Ohio, $\$ 35 ; \mathrm{J} . \mathrm{O}$.
 L. B. D., of II., $\$ 30$; MCC.. \& B., of Mo., $\$ 35$, A. S., of N. Y., $\$ 30$; express, from Belifid, Va.-name of sender unknownf

Specifications, drawings and models belonging to parlies with the following initials have been forwarded to the Patent Onfice dur ng the week ending Saturday, June 2. 1860:- nitusiti M. H., of Conn.; S. B., of Ga., H. G. N., of N. Y.; W. H. P., of Wis.; W. L., of Mass.; W. G. S., of Ga.; G. J., of Ohio ; S. H., of
Ind.; T. \& C., of Ky.; T. H. Q., of N. Y.; H. B., of Ill.; W. C. D of Pa.; L. S. W., of Vt.; E. D. C., of Conn.; C. A. B., of Vt.; H. B. of Pa.; L. S. W., of Vt.; E. D. C., of Conn.; C. A. B., of Vt.; H. $B_{0}$
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N. U., of Conn.; J. N. J., of Mass.; J. A. F., of Ala.; E. K. H., of N. Y.; R. H. of L., of Pa.; D. P., of N. Y.; D. F. E., of Mame; D. D A., of Mase.; J. W. H, of M.; L. I., of N. Y.: D. \& M., of Va.; J. G., of Ma.; J. M. D., of II.; L. B. D., of R. I; E. D. L., of N. Y.

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