stripg, called furring. This should be done on all outsidewalls, and, if not now
likely be a remedy in this case.
(2) J. B. Jr. says: It is proposed to put up alock of buildings one story high in front, two stories in the middle, and three stories in the rear, two story building,being higher, interfere with the draft in the flues of the one story building, an the three story building with that of the hues dy? A. The probabilities are that the flues wil not draw well three quarters of the time. The remedy is to build the third story of the same depth as the second, to draw the flues of the first story extension over to the rearwall of the second story, and carry the chimney shaft up against the the building at the usual hight above said roof.
(3) J. B. S. asks: What steel is used and ow is it tempered, for making steel magnets? A. A very h
(4) T. C. N. asks: 1. What ingredients are used in the white glazing of cast iron pans? For enameling cast and wrought iron vessels, two
compositions are in use; one has for its base silicompositions are in use; one has for its base sili-
cate of lead, and the other boro-silicate of soda. One of these enamels is applied to the scoured surace of the metal in the form of a powder, which is fixed by heating to a sufficiently high temperature to fuse; it then spreads over and covers the meta! with a vitreous varnish. The boro-sllicate of soda possesses great superiority over the silicate of lead, for it is not attacked by vinegar, maine salt, or the greater number of acid or saline solitions, even whe in cooking or chemical ope rations. The silicate of lead enamel is whiter and more hom given it by the public, but it gives up oxide of lead to vinegar or to common salt; it acts upon great number of coloring matters, and it is at-
tacked by nitric acid, which communicates a dull tacked by nitric acid, which communicates a
color to it. On evaporation the liquid leaves a white crystalline residue of nitrate of lead. This enamel is instantly darkened by dissolved sulphur, such as cabbage, fish, and egge. 2. Can the ameglaze be used on earthen tiles or other ware A. Yes. 3. Can the glaze be colored green, blue,
or yellow? A. To color the enamel green, mix with it before heating 1 to 2 parts oxide of chromium to 10 parts enamel. For blue, use prepared cobalt, red lead, niter, each 1 oz. For yellow, us oz, and niter 4 ozs. Gold and purple of Cassius are used for red and purple. For black, use calcined iron and cobalt, each 1 oz ., or zaffre 2 ozs., mauganese, 1 oz.
(5) S. C. D. asks: In blowpipe analysis What does the abbreviation B.B. mean? A. Bealso called ruddle and red chalk. It is red ocher containing some clay.
(6) J. M. asks: 1. Will mercury evaporate itssurface is covered with water? A. It will or the purpose of collecting gold from any com
fored position which may contain it, without infringing on any patent right? A. Yes. 3. Can copper be oated with mercury without first being silver alphuric acid (diute) and sand ringe in contle ter, dip in the mercury, and rub evenly over the surface with a brush. 4. Will an iron muffle answer in a furnace for the cupelation of silver in any for
(7) O. H. L. asks: How can I make a cylor compressing gas for the oxy-hydrogen light? Is there any special joint or seam, or any
composition, in use for making the joint tight? A. These cylinders are made of boiler iron riveted
(8) S. T. asks: 1. How are magnetic fish made? A. See p. 218, vol. 32. 2. Is the paper which they are made magnetized? A. No
What power of microscope is necessary for hemists use, for examining blood corpuscles,etc.? A. Theortically, the magnify practically this is not precisely the case, since the mechanical difficulties of grinding and fitting the component lenses produce slight variations in the focal distance, and, of course, in the power. A lens whose focal length is actually $1_{1}^{1}$ of an inch,
and its magnifying power, when arranged with an eyepiece as above, is about 45 diameters, may be old as a one inch objective, or the error, as is more frequently the case, may be on the other
side, so that the purchaser obtains, for the price of al inch objective, a lenshanng an actualpower when combined, of 55 diameters. For the use o hemists, we would recommend a $\%$ inch object glass with an angular aperture of about $32^{\circ}$, magnifing, with the various eyepieces, from 75 to 450 diameters. For the use of physicians, a $\frac{1}{6}$ inch object glass, with angular aperture of $100^{\circ}$, magnifying from 250
How can I make a sea green paint? A. The fol owing will give a beautiful blue-green tint: Add ustic, previously clarifled by a solution of gelatin. To this mixture is then added 10 or 11 per cent of protochloride of tin, and lastly an excess of caustic potash. Wash and dry the precipitate
What can I mix with common stable manure to make a good tobacco fertilizer? A. Lime, but perphosphate of lime.
(9) C. A. K. asks: Is heat visible? A feat is a parts of a body
(10) A. F. asks: What is the difference be ween ebonite and vulcanized india rubber? A
Ebonite is made by heating india rubber with hal its weight of sulphur.
Is there any method of reducing tortoiseshel a soft state, so that it could be easily molded
(11) M. D.W. asks: 1. Can the same stil that is used for distilling oil of peppermint be used for manufacturing sassafras onl? A. Yes, if wel A. Very 2 . Is there any difference in the prolss A. Very rectification to render it bright and fine. (12) J. J. KcK. says: My hair grows ver low on my forehead, in fact it reaches my eye brows and quite covers my temples, injuring $m$ looks very much indeed. As I am a lady, I am
vain enough towish it removed, if it can be done without scarring my face. A. The following ha been successfully used: Take sulphuret of calci um (fresh) and quicklime equal parts, reducethem separately to fine powder, mix, and keep the mix ture in a well stopped bottle. When used, a por
tion is made into a paste with warm water, and immediately applied to the part, previously shaved close, a little starch being generally added in orde caution in its use. It should be applied to only small surface at a time, and great care should be taken to prevent it from extending to the adjacen parts. The powder loses its properties unless en tirely excluded from the air, and no liquid must b added until just before application, and then to $n$ (13) G. D. S. asks. Will Babbitt
(13) G. D. S. asks: Will Babbitt metal im part unhealthy properties to butter, when abou bout 4 gallons of cream? some risk (14) L. L. D. asks: Is it not good reasoning ought to separate? Nevertheless, I have anarti that I can honestly saw through ten times on the same line, and then hand it back very nearly as
stroug as ever. A. We have frequently ceen a similar restr. A. We have frequently similar result br
(15) A. McG. asks: What is the cheapest method of finding water in a light, loose sand
(16) G. S. asks: How can I make laundry
bue paper? A. Make a concentrated solution of blue paper? A. Make a concentrated solution o indigo carmine, in which steep the paper desire to be coated, and evaporate the solution until the oring matter.
(17) J. G. H. asks: 1. What ingredient in the egg causes the spoon to be stained? A. Sul A compound chemical change takes place? A A compound of sulphur in the albume,
attacks the silver, forming a sulphide.
(18) C. D. P. F. asks: How can the steel on anengine be cleaned so as to look bright and bur nish $A$. Use ine emery pape
(19) G. L. S. asks: Is there anything that can be used in making cologne that will make the (20) E. E. E. asks : 1. Should green appl wood for handles be cut into pieces the size of a
handle, and let it dry before using, or would it be handle, and let it dry before using, or would it be
better to saw intoboards and cut up when dry ? A. The latter is best. Let the boards dry thoroughly before using. 2. How are light colore andles made black and polished to imitate ebony polishin. 259, vol. 30 . 3. What is the usual way See p. ,72 vol. 26 .
(21) C. E. C. asks: Is there any way in
which the dates on coins can be madeclearer? A Carefully clean the coins with dilute nitric acid nse with water, and polish
(22) L. H. W. asks: How can I best remove baked Japan surface from old sewing machines in order to get a smoother surface for anothe
coat of Japan? A. Use a steel scraper.
(23) G. S. R. asks: What size lof cistern will it require tosupply a schoolof about 75 pupils, feetof spouting being used? A. Make your cis tern 6 feet in diameter in the clear on the inside and about 5 feet deep below the crown. 2. Of what materials and shape should the cistern be A. Build it of brick with 8 inch walls laid up in
Rosendale cement mortar, and with brick bottom Rosendale cement mortar, and with brick bottom and crown. Make it circular. 3. How can I make with a 4 inch brick partition; bave small hespace the ingress of water the bottom of this part tion, and flll said one third space with a layer of gravel and clean coarse sand about 6 inches deep Place on top of this a layer of charcoal about inches thick, and then another layer of sand an gravel like the flrst. Let the water enter the cis tern into the larger space, and be drawn from th (24) H. A. M. asks: I intend to build anout oor cellar of brick. Could I make it frost proo by having an eight inch wall outside and a fou the walls, flled with dust from the bed of a char coal pit? A. This would make a wall that should retain the warmth of the interior of the cellar:but care should be taken to bind the walls together to prevent their being thrown apart.
(25) J. V. says: I have just built a large feet high, in the basement of a building $21 /$ storie high, connecting it with two flues about $8 \times 8$, in the room above, about 10 feet from top of fire place. There is a good draft to both flues, but not enough to prevent the areplace smoking terribly How can I remedy it? A. If the Hues are to gether, and it is practicable, you had better re-
move the dividing partition between them, and
make them into one.

