

USEFUL HINTS.

FURNACE FLUES.—In some cases, it becomes impossible to locate a furnace to supply warm air to all the flues built in the house. This difficulty could be overcome if all the details of location of furnace, length, size and shape of air pipes and flues, size and position of smoke flue, position and size of cold air duct, were carefully studied, and included in plans and specifications.

The proportions of lead and tin in solders vary with respect to the heat to which the soldered joint is likely to be exposed. Coarse solder is generally composed of three parts of lead and one part of tin; this melts at 480 degs. Fahr.; plumbers' solder composed of two parts of lead and one of tin, melts at 440 degs.; and fine solder, made of equal parts of lead and tin, fuses at 370 degs. The melting point of lead is 612 degs.

Marble may be stained different colors by the use of the following substances: Blue, solution of litmus; green, wax colored with verdigris; yellow, tincture of gamboge or turmeric; red, tincture of alkanet or dragon's blood; crimson, alkanet in turpentine; brown, tincture of logwood; gold, equal parts of verdigris, sal ammoniac, and zinc sulphate in fine powder. The marble should be not quite polished, but made perfectly smooth and ready to receive the highest finish before the stain is applied. The longer the stain is left in contact the better the result.

M. Le Chatelier, the well-known French engineer, advocates the practice of hardening cement briquettes in hot water. In this way the chemical reactions are accelerated, and in the case of good cement the briquette is said to be after two days' hardening in hot water as after seven days' in cold, or after seven days' hardening in hot water the briquette gives the same results as after 28 days' in cold. The method is also pointed out to be of value in detecting the presence of free lime in the specimen, as in that case the briquette flies to pieces, from the expansion of the lime, if the hardening takes place in warm water.

CLEANING SHEETS OF WROUGHT IRON, ETC.—Wrought iron plates are pickled in hot dilute of sulphuric acid in the ordinary way; commercial oil of vitriol diluted with ten volumes of water being preferably used at a temperature of 200 degrees F. The improvement consists in allowing the contents of the pickling tank when sufficiently concentrated to flow slowly through a long cooling channel and there deposit the greater part of the dissolved sulphate of iron, the mother-liquor passing into a vessel from which it is continually pumped back into the pickling tank, vitriol and water being added till it is of the proper strength. The process is continuous on being fairly started. Cylindrical pickling tanks are used for cleaning wire.

TO STAIN BROWN.—Make a decoction by boiling one part of Catechu, Cutch, or Gambier, in thirty parts of water, to which add a little soda. Apply this to the wood which is to be stained, and allow it to dry

in the air. Make a solution of one part of bichromate of potash and thirty parts of water, and apply over the stain, which may be varied in color according to the strength of the solutions used. Catechu, which is much used in dyeing and staining, is the extract of the wood of the Acacia Catechu, the seeds of the Areca Catechu, and the leaves of the Nauclea Gambir. The Acacia Catechu is a small spiny tree, rarely exceeding twenty feet in height; the wood is hard and heavy; the centre is of a very dark red color nearly approaching to black; it is from this portion of the wood that the extract is made.—*Painters' Gazette.*

INDIAN RED.—This pigment is brought from Bengal, and is a very rich iron ore, hematite, or protoxide of iron. It is an anomalous red, of a purple-russet hue, good body, and valued, when fine, for the pureness and lackey tone of its tints. It is a coarse powder in its crude state, full of extremely hard and brilliant particles of a dark appearance, sometimes magnetic, and is greatly improved by grinding and washing over. Its chemical tendency is to deepen, nevertheless it is very permanent, neither light, impure air, mixture with other pigments, time nor fire effecting in general any sensible change in it. Being opaque, it covers well. Indian red varies greatly in its hues, that which is most rosy being considered the best, as affording the purest tints. Inferior red ochres have been formerly substituted for it. Another name for this pigment is Persian red.

Prices of Building Materials.

LUMBER.

CAR OR CARGO LOTS.

1 1/2 and thicker clear picks, Am. ins.	\$30 00 @ 32 00
1 1/2 and thicker, three uppers, Am. ins.	37 00
1 1/2 and thicker, pickings, Am. ins.	27 00
1 x 10 and 12 dressing and better.	18 00 20 00
1 x 10 and 12 mill run.	13 00 14 00
1 x 10 and 12 dressing.	14 00 16 00
1 x 10 and 12 common.	12 00 13 00
1 x 10 and 12 spruce culls.	10 00 11 00
1 x 10 and 12 maple culls.	9 00
1 inch clear and picks.	26 00 30 00
1 inch dressing and better.	18 00 20 00
1 inch siding, mill run.	14 00 16 00
1 inch siding, common.	12 00 12 07
1 inch siding, ship culls.	\$10 00 @ 12 00
1 inch siding, mill culls.	8 00 9 00
Cull scantling.	8 00 9 00
1 1/2 and thicker cutting up plank.	22 00 25 00
1 inch strips, 4 in. to 8 in. mill run.	14 00 15 00
1 inch strips, common.	12 00 12 00
1 1/2 inch flooring.	14 00 15 00
1 1/2 inch flooring.	14 00 16 00
XXX shingles, sawn.	2 30 @ 2 35
XX shingles, sawn.	1 30 1 35

Metallic Roofing Co. of Canada:

Eastlake steel shingles (galvanized),	Per Square,	\$5 25 to \$5 75
Eastlake steel shingles (painted),		3 75 4 00
Improved Broad Rib Roofing (galvanized),		5 00 5 75
Improved Broad Rib Roofing (painted),		4 50 4 00
North Western steel siding (painted),		3 25 3 50
Manitoba steel siding (painted),		3 25 3 50
Metallic Finished Brick,		3 25 3 50
Tower or Mansard shingles, (galvanized)		6 25
Tower or Mansard shingles (painted),		4 50
Metallic Terra Cotta Tiles,		7 00
Price of Copper shingles according to weight, and "Hayes" Patent Metallic Lathing according to quantity.		

Canada Galvanizing & Steel Roofing Co.:

Corrugated Iron, galvanized, 26 W. G., per lb.	5 cts.
Corrugated Iron, galvanized, 28 W. G., per square.	5 1/2
Corrugated Iron, painted, 26 W. G., per square.	4 00
Corrugated Iron, painted, 28 W. G., per square.	3 50
Broad Rib Roofing, galvanized, per square.	5 50
Broad Rib Roofing, painted,	4 00
Westlake shingles, steel, galvanized, per square.	5 00
Westlake shingles, steel, painted	3 50
Standard shingles, "Walter's patent," galvanized, per square.	5 50
Standard shingles, "Walter's patent," painted,	4 00
Northwestern steel siding, patented, per square.	3 50
Metallic Finish Brick, per square.	3 25
Metallic Finish Clapboard, per square.	3 50

YARD QUOTATIONS.

Mill cull boards and scantling.	10 00
Shipping cull boards, promiscuous widths.	13 00
Shipping cull boards, stocks.	1 00
Hemlock cantling and joist up to 16 ft.	11 00 14 00
" " " 18 "	12 00 13 00
" " " 20 "	13 00 14 00
Scantling and joist, up to 16 ft.	14 00
" " " 18 ft.	15 00
" " " 20 ft.	17 00
" " " 22 ft.	19 00
" " " 24 ft.	21 00
" " " 26 ft.	23 00
" " " 28 ft.	25 00
" " " 30 ft.	27 00
" " " 32 ft.	29 50
" " " 34 ft.	31 00
" " " 36 ft.	33 00
" " " 38 ft.	35 00
" " " 40 to 44 ft.	36 00
Cutting up planks, 1 1/2 and thicker, dry board.	25 00 26 00
Cedar for block paving, per cord.	5 00
Cedar for Kerbing, 4 x 14, per M.	14 00

B. M.

1 1/2 inch flooring, dressed, F. M.	28 00 31 00
1 1/2 inch flooring rough, B. M.	18 00 28 00
1 1/2 " " dressed, F. M.	25 00 28 00
" " " undressed, B. M.	18 00 20 00
" " " dressed	18 00 22 00
" " " undressed	22 00 25 00
Beaded sheeting, dressed	22 00 33 00
Clapboarding, dressed	12 00 15 00
XXX sawn shingles, per M, 16 in.	2 65 2 75
Sawn lath.	2 00 2 30
Red oak	30 00 40 00
White	15 00 20 00
Basswood, No. 1 and 2	18 00 20 00
Cherry, No. 1 and 2	70 00 75 00
White ash, No. 1 and 2	25 00 30 00
Black ash, No. 1 and 2	20 00 30 00
Dressing stocks.	16 00 22 00
Picks, American inspection	40 00
Three uppers, American inspection	50 00

BRICK—M

Common Walling	\$7 50
Good Facing	9 00
Sewer	8 50 9 00

Pressed Brick:

Plain brick, f. o. b. at Milton, per M.	\$18 00
" " and quality, per M.	14 00
" " 3rd	10 00
Hard Building	8 00
Moulded and Ornamental, per 100	\$3 10 10 00
Roof Tiles	24 00
Diamond locking tile	16 00
First quality, f. o. b. at Campbellville, per M	18 00
2nd " " "	14 00
3rd " " "	11 00
Ornamental, per 100	\$3 10 10 00
Tiles	24 00

Stone.

Common Rubble, Per Toise, delivered	14 00
Large Hat " " Cubic Foot.	18 00
Foundation Blocks, " "	50

Slate: Roofing (per square).

" red	18 00
" purple	9 00
" unslating green	9 00
" black slate	7 75
Terra Cotta Tile, per sq.	25 00
Ornamental Black Slate Roofing	8 25

Sand:

Per Load of 1 1/2 Cubic Yards	1 25
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PAINTS. (In oil, per lb.)

White lead, Can.	6 25 6 50
" zinc, Can.	6 50 7 50
Red lead, Eng.	5 50 6 50
" venetian	1 60 1 75
" vermilion	90 1 00
" Indian, Eng.	10 12
Yellow ochre	5 10
Yellow chrome	15 20
Green, chrome	7 12
" Paris	25 40
Black, lamp	15 25
Blue, ultramarine	15 20
Oil, linseed, raw (per Imp. gallon)	68 75
" " boiled	72 70
" " refined	78 85
Putty	2 1/2 2 50
Whiting, dry	75 1 00
Paris white Eng., dry	90 1 25
Litharge, Am.	6 1/2 8
Sienna, burnt	15 20
Umber	8 1/2 12

CEMENT, LIME, etc.

Lime, Per Barrel of 2 bushels, Grey.	40
" " " White	55
Plaster, Calcined, New Brunswick	3 00
" " Nova Scotia	2 00
Hair, Plasterers', per bag	1 00
Cement, Portland, per bbl.	3 00 3 50
" Thorold, "	1 50
" Queenston, "	1 50
" Napanee, "	1 50
" Hull, "	1 50

HARDWARE.

Out Nails:

American Pattern, 1 1/2 inch, per keg	4 30
" " 1 1/2 to 2 1/2 inch, per keg	3 50
Canadian Pattern, 1 1/2 inch, per keg	5 80
" " 1 1/2 to 2 1/2 inch, per keg	3 30
" " 2 to 2 1/2 inch, "	2 30
" " 2 1/2 to 3 1/2 inch, "	3 25
" " 3 inch and larger	2 80
Steel nails roc. per keg extra.	
Finishing nails, 1 inch, per keg	\$ 9 1
" " 1 1/2 inch, "	5 20
" " 2 1/2 inch, "	4 65
" " 3 1/2 inch, "	4 35
" " and larger	3 30