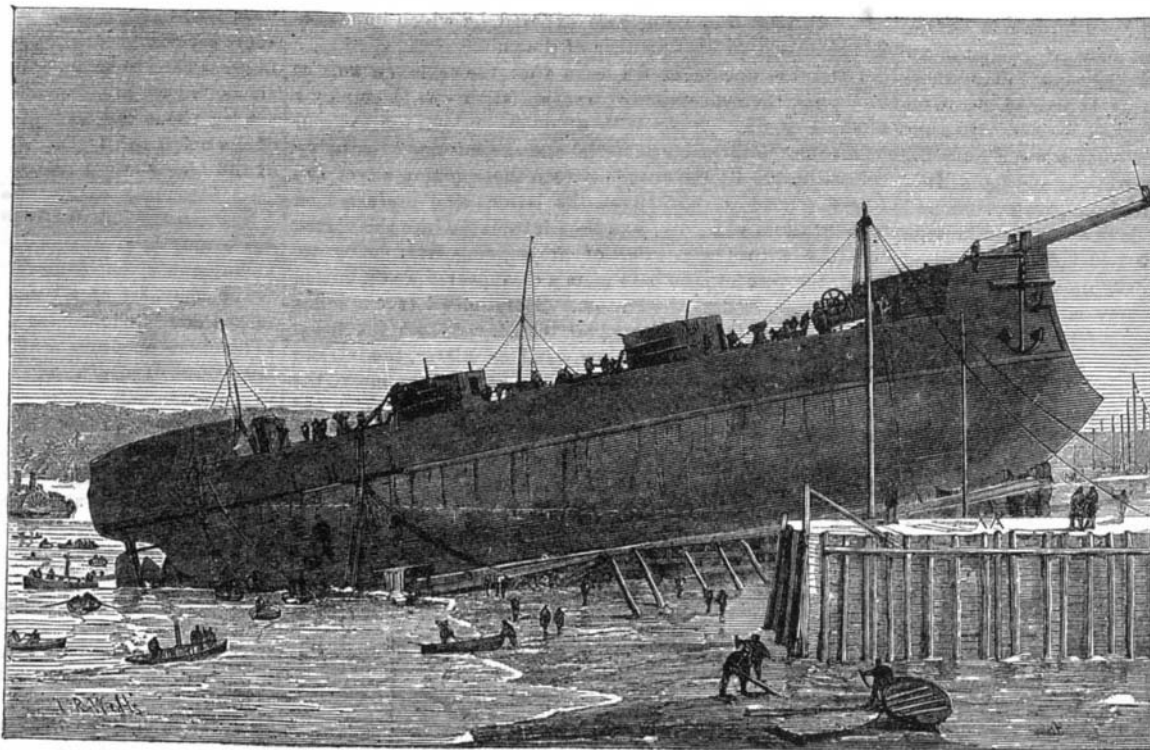


DISASTER IN LAUNCHING A TURRET SHIP ON THE THAMES.

The ironclad man-of-war and steam ram *Independencia*, just built for the Brazilian government at Dudgeon's yard Blackwall, London, is now lying, to all appearance, a wreck on the foreshore close to Cubitt Town Pier, with the tide at high water washing over her decks, having met with a disaster in launching. The ship is 310 feet long and very broad, having a beam of 63 feet, and she is of 5,000 tons burden, builder's measurement, which is equivalent to a displacement of 10,000 tons when armed and afloat. She has two turrets on deck; the decks are of iron covered with wood, and the sides are covered with a belt of 12 inch armor plates to a depth of about 14 feet. The armor being nearly all fixed while the ship was on the stocks, the weight of the hull was little short of 6,000 tons, and the operation of launching was therefore felt to be one of considerable difficulty. Hydraulic rams were employed to start the ship, which went safely down the slips for about her own length, and then stuck fast. The rams and all manner of appliances were brought to bear, but failed to move the ship further; and when the tide fell she settled down with her stern in the bed of the river, about a third of her length only having left the ways. Her position is a critical one, and the outer shell of her double bottom has given way in the bilges. We give a representation of her as she remains fast on the ways, extracted from the *Illustrated London News*.



THE FRIGATE INDEPENDENCIA AFTER THE ATTEMPTED LAUNCH.

situated in the Middle States that during the present month is a good season to transplant evergreens, and this work is best performed soon after a good rain, or when the ground is mellow enough to admit of getting as many perfect roots up as possible, but by no means permitting the trees after being lifted to be long exposed to the action of the sun or drying winds; cloudy weather is desirable for this work; and should the ground to be planted be light and dry, give a good settling of the earth about the roots with water, finish-

Herb Cultivation.

The London *Garden* contains the following account of herb raising for commercial purposes, at Mitcham, England, a place long celebrated for its herb fields, from which the London herbalists derive their mint, sage, licorice, and similar herbs. Of these, as a rule, distillations are made by the growers, and they are disposed of in a semi refined condition, or the herbs themselves are brought into market as soon as they are harvested.

Chamomile.—To this several acres are devoted, the double flowered kind being preferred on account of the weight of the produce; but both single and double sorts are grown. In March, old and somewhat spent plantations are broken up and the plants divided into good rooted slips, which are planted in well prepared ground in rows 2½ feet apart, and 2 feet asunder in the rows. A common practice, however, is to plant as thick again as this, and to thin out the plants afterwards to the distances just named. The plantations are intercropped with lettuces in spring. As soon as the blooms begin to expand, they are fit for gathering, and from that time, as long as they yield sufficiently to pay, the flowers are gathered several times in a season by women, who are either paid a regular day's wages, or a penny, or thereabouts, per pound for picking.

Lavender.—This is extensively cultivated at Mitcham, both farmers and cottagers bestowing special attention on it; and this district presents a lovely sight in the last fortnight of July, when the different fields of it are in full bloom, the air for miles around being loaded with its fragrance. Lavender is increased by means of rooted slips, planted out in rows about 18 inches apart and half that distance asunder, in March or April. Sometimes the sets are planted as wide in the row as the drills are apart. For the first year the produce amounts to but little; and, therefore, parsley or lettuce is planted between the rows. As soon as the plants have grown sufficiently to become crowded, every alternate row, and also every alternate plant in the rows left, is lifted—say in spring—and transplanted into another field, so as to form a new plantation. Thus the plants stand 3 feet apart each way, or 3 feet one way and 18 inches the other. Coleworts, lettuces, or other early and quickly matured crops, are raised among the lavender in the early part of the year; but, after June, all such catch crops are removed. The flowers are usually harvested in the first fortnight of August, and, as has been stated, are distilled at the farm on which they are grown.

Licorice.—This was once largely grown at Mitcham, but, although it is grown in considerable quantities, it is not now so extensively cultivated there as formerly, on account of the cost attending its culture. It entirely occupies the ground for three years, and during that time requires great attention in the way of cleaning, besides the ultimate cost of trenching out the roots, or, rather, underground stems. The ground, being deep, is heavily manured in autumn or winter, when it is trenched and laid up in ridges, in a rough state, till spring. It is then leveled, marked off in drills about 2 or 3 feet apart, and some 3 or 4 inches deep, and in these the sets are planted in March. The sets consist of finger length pieces of the old root stems, each containing an eye or two. During the first year the ground is usually intercropped, as is also the case in the earlier portion of the second year; but after the

middle of the second summer, and throughout the whole of the third year, the licorice requires all the room. When the stems are matured in the autumn of each year, they are cut over close to the ground; and if time can then be spared, the soil between the rows is forked over, some well decayed manure being occasionally worked into it at the same time. The lifting of the crop, which usually takes place in the end of the third season, is a difficult operation, involving much labor. A deep trench is cast out, lengthways, alongside the first row, and by means of forks, pulling ropes being even sometimes employed, the root stems are extracted. In this manner the whole of the rows are treated, until all are successfully lifted. The roots may then be stored in sand or pits, like beets, carrots, or potatoes. Growers of licorice do not always harvest the crop; on the contrary, they some-

BURNISHING SURFACE COLORED PAPERS.

Marbled and other papers which have color laid on one side have been hitherto burnished or glazed by rubbing with a polished flint or other stone, worked over the surface by hand. Many attempts have been made to substitute glazing rolls and other appliances for the tedious process, but no good result has ever been achieved. M. Alauzet, of Paris, exhibited at Vienna a machine for manipulating the burnishing stone, and thus economizing the cost without impairing the beauty of the imparted surface. This machine, which may be used for dyed and undyed paper, is double acting; the sheets of paper are represented by *e*, while *a* shows the burnishing steel or stone guided and moved by the bar, *b d t*, and the rod, *g*, which is connected with the crank, *f*. The weights, *t* and *l*, may be increased or diminished according to requirements.

We are indebted to *Engineering* for the engraving.

Lawn and Pleasure Grounds.

A writer in the *American Farmer* for September reiterates, what we have often stated, that the love and taste for horticultural pursuits is rapidly growing in this country. He also states the generally known fact that, up to the present time; the great majority of thorough practical gardeners in the United States are foreigners, and even those, however well educated in that profession at home in their native land, have, under a different climate and other influences by which they are surrounded in this land of their adoption, to pass through another term of apprenticeship before they can make their services acceptably available; we speak here of thoroughly educated men in the profession, and not of that crowd of one-year pretenders by which the country is overrun. It has been often remarked that very few native born Americans take to horticulture as a profession; and that when they do, it is usually to enter upon the higher or lighter branches, or follow it as a mercantile or money-making pursuit. Yet it is true, beyond all dispute, that the love of horticulture is growing rapidly, as may be seen by the millions of fruit trees put out as orchards, and tens of millions of flowers used annually in the flower garden, together with the ornamental trees and shrubs which are sought after with avidity.

The residences that formerly stood isolated on the plain are now seen nestling in groves of umbrageous trees, embracing the noblest and most desirable kinds to be found in all temperate climes; now this state of things is pleasing for all lovers of Nature to contemplate, and should not every laudable incentive be used to further its growth? As having a tendency in that direction, we would remind those

ing the filling in around the stem with loose earth, which prevents the surface from cracking, should a drouth follow.

Cuttings made of the present year's growth root freely at this season, of such hardy shrubs as wigelias, forsythias, spiræas, and deutzias; make the slips about 3 to 6 inches long, removing the leaves entirely from the lawn half, and those on the upper half cut back so as to leave about one inch of the leaves and petioles; then plant them in a sandy soil in some shady place, observing to press the earth close to the cutting; these, when rooted, can remain until next spring, against planting out permanently.

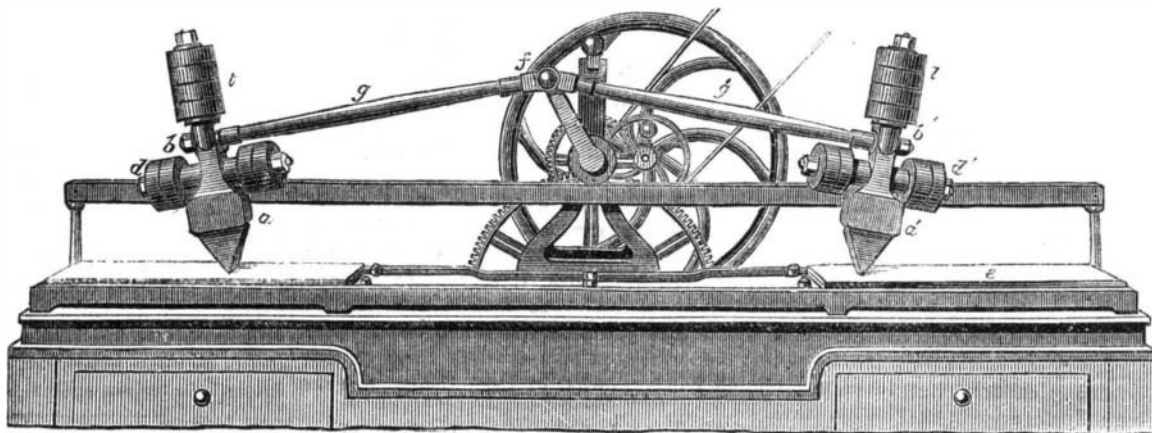
Samples of seeds of choice border plants should be from time to time collected, and placed in a cool airy place to dry; if the kinds collected are pure, and have not been contaminated by impregnation of worthless sorts growing close by, then you are stocked for next year and will have the pleasure also of helping your friends to a few, as the votaries of Flora ought by all means to eschew anything that would border on selfishness. When the flowers in your beds or borders become unsightly from decay, have them removed and the ground raked clean and smooth. Such articles as dahlias should be tied up neatly to stakes. For ourselves, we prefer training them so that they will lie upon the ground, where a greater number of finer flowers will be produced; we attribute the difference to the ground being kept cooler and more regularly moist during the heat of summer.

Toward the end of the month, prepare beds in which to

plant tulips, hyacinths, narcissus, crocus, and lily roots; a sandy soil, made rich by well rotted cow manure, suits them best.

Wood the Most Costly Building Material.

Four fires on the 11th and 14th of July, in Illinois, Wisconsin, and Iowa, destroyed wooden buildings, which cost originally \$350,000, and an aggregate of \$5,080,000 property. These buildings cost about \$70,000 less than brick ones would have done. The wooden buildings burnt at Chicago, July 14, first cost \$150,000, but carried with them property to the amount of \$4,000,000. The wooden buildings burnt in the great fire of 1871, when the entire loss was \$200,000,000, were worth \$2,000,000, or one per cent of the whole. Wood is thus shown to be one of the costliest of building materials



PAPER BURNISHING MACHINE.