

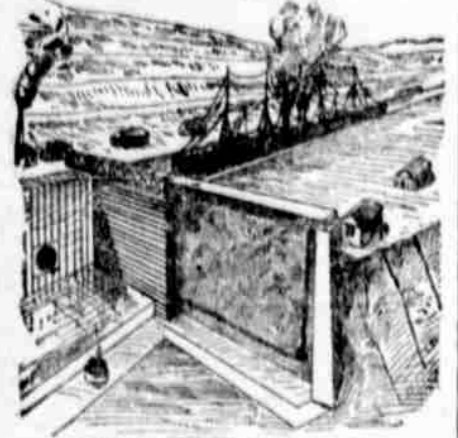
SCIENCE AND PROGRESS.

A CURIOUS REPTILE THAT CAME FROM SAINT DOMINGO.

All About the New and Improved System of Locks Recently Devised by Mr. Eiffel for Use in the Construction of the Panama Canal.

A new system of locks has been devised by Mr. Eiffel for use on the Panama canal, by which the emptying and filling of a lock will take but a quarter of an hour. From an illustrated description of these locks given by Le Genie Civil is reproduced the following:

The gates consist essentially of a hollow, balanced, movable caisson, capable of sliding above at right angles with the axis of the canal, on a track carried above the canal by a revolving bridge. This track is prolonged above the lateral chamber. The motion is analogous to that of the doors which slide at the top that are generally used in locomotive shops. When the flood gate is placed in the chamber it is only necessary to revolve the bridge 90 degs. to free the passage and allow boats to go through.



LOCK OF THE PANAMA CANAL.

In the cut is represented the flood gate of the lock. The gate or movable caisson, the sides of which are stiffened from meter to meter by strong horizontal T shaped iron beams which carry all the stress of the water pressure over to the side walls, is arranged beneath like the working chambers of the caissons used in constructing bridge piers. Moreover, above the working chamber it is divided into nine compartments by three horizontal and three vertical positions. All these compartments, as well as the bottom chamber, communicate with the external air through chimneys starting from air locks, so that either water or compressed air may be allowed to enter them at will. Owing to this arrangement it is easy to balance and ballast the gate, and besides, on exhausting its different parts in succession, to inspect and repair them. The gate is suspended from a carriage provided with rollers, which, on rolling over the track carried partly by the bridge and partly by a framework, carries along the gate.

In order to introduce so great a mass of water in so short a time (40,000 cubic meters in fifteen minutes), it has been necessary to adopt peculiar arrangements. The method adopted consists in making the water flow through the entire length of the lock and in vertical jets, so as to prevent the strong eddies and tumultuous motions that would necessarily be produced in this arrangement.

A Curiosity in Way of Lizards.

The Museum of Natural History at Paris has now in its possession a curious reptile that came from St. Domingo. It bears the name of horned lizard.



THE HORNED LIZARD.

The horned lizard is described by La Nature as about twenty-eight inches in length. Its body is gross and squat, of a brown color, and the line of the back is covered with spines that point backward, from the back of the head to the beginning of the tail, where there is a small space destitute of them. The tail is not cylindrical like that of our lizards, but is compressed laterally, and is provided with strong muscles that allow the animal to switch it abruptly and powerfully in either direction in order to defend itself when any one tries to touch it.

Back of the head, which possesses remarkable peculiarities, the back is provided with a sort of hump. The head, which is surmounted in front with a dermic horn, is large and inflated on each side at the back. Under the lower jaw we observe a fold in the skin, flanked on each side by large pockets, that give the animal, in a face view, a most curious aspect.

Modern Explosives.

The composition of some of the modern high explosives, according to Engineering, is as follows:

Dynamite—75 parts of nitro-glycerine and 25 of infusorial earth.

Rendrock—40 parts nitro-glycerine, 40 of nitrate of potash or soda, 13 of cellulose, and 7 paraffine.

Giant Powder—36 parts of nitro-glycerine, 48 of nitrate of potash or soda, 8 of sulphur, and 8 of resin or charcoal.

Mica Powder—52 parts nitro-glycerine and 48 of pulverized mica.

Blasting Gelatine—23 parts of nitro-glycerine and 5 of gun cotton. It will be noticed that nearly all the above explosives are composed principally of nitro-glycerine; and it is probable that in most cases the other ingredients only act as absorbents of this liquid, and really add nothing to the explosive power.

A New Military Ration.

According to a recent statement made in a foreign exchange, all the garrisons within the limit of the Seventh German army corps have now been provided with larger samples of the new article of food which is in future to form the so called "iron ration" of the men in the field. It is a peculiar kind of bread, in the shape of small cubes the size of a chocolate drop, made of fine wheat bread, strongly spiced, and calculated to keep for a long time. When taken into the mouth it quickly softens, and is both palatable and nutritious. It is chiefly intended for forced marches, when there is no time for camping and cooking.

A Worm in a Hen's Egg.

Every now and then somebody reports as a wonderful phenomenon, the finding of a worm in a hen's egg. A writer in Science explains that the normal habitat of the worm in question, is the fowl's intestine, but it occasionally wanders into the vitellus.

ALL AROUND THE HOUSE.

A Clever Woman Turns Amateur Decorator—To Make Sweet the Linen Press.

An ingenious amateur, a lady, recently did a very creditable job of decoration on the walls of a room, which was accomplished, according to Decorator and Furnisher, as follows:

The ambitious artist had a coat of coarse plaster put upon the wall which she wished to decorate. After marking it off into panels and columns, she mixed plaster of paris with size until it was of proper consistency, then added a sufficient amount of color to make it a delicate shade of olive. A thin coat of this was put over the entire wall surface and allowed to dry. Then a little dark green bronze was put into the mixture and applied to the lower portion of the middle of the panel. This was not smoothed, but patted over so as to produce a surface covered with little dots and points. A single experiment will show the result more clearly than any amount of explanation could do.

Above the dark bronze was a lighter shade of a yellowish cast. The two occupied a space of but little more than four inches from the lower part of the panel. A vine was sketched in the damp plaster, the tendrils and leaves drooping from the heavy stalk on one side, and following the inner line of the panel, which was arched at the top. The background grew lighter toward the upper part until it was of the cloudy, hazy, golden gray of Indian summer.

The next panel was done in shades of gray, with bramble bushes and golden rod, and a dull blue sky. A morning glory in pale greens and purples, a climbing rose, a passion vine, and a lattice with delicate bars and creepers were among the panel decorations. Columns were sketched in and a frieze of medium depth finished the amateur work. The ceiling had been previously done by a professional decorator. The entire surface was rough, and the vines, flowers and leaves were in slight relief. The columns were still more prominent, and were done in dark gold bronze with bases of dark olive green.

Horse Radish Sauce.

A simple sauce, which forms the grand standard adjunct to roast beef, is horse radish sauce. To make this, scrape as finely as possible a cupful of the root shavings; simmer them in half a pint of chicken broth; when done thicken the broth with the yolks of three eggs, beaten up with a dessertspoonful of tarragon vinegar; add pepper, salt and a very little ground nutmeg, and serve very hot in a sauce boat. If it is desired to make it richer, a coffee cupful of cream mixed with the yolks of the eggs, and stood on the fire in a double boiler, and stirred until it is very hot, is all that is necessary. The cold form of this sauce is the easiest to make, and as nice as one could wish for. The horse radish root is simply rasped until we have a cupful of fine scrapings, and then mixed with an ordinary mayonnaise, or with three tablespoonfuls of cream, one tablespoonful of vinegar and one of sugar.

Roast Chestnuts and How to Serve Them.

The first requisite in preparing this popular refreshment is a clear fire, which is best obtained by the use of coals. Be sure that the chestnuts are good. Then cut a transverse slit on the flat side of the chestnut, not on the convex side; use a sharp knife, and be careful not to cut into the chestnut. Put them into an old frying pan or flat iron vessel of some sort, the bottom of which must be perforated with holes about the size of a pea. A frying pan with holes punched in will answer the purpose. Put the chestnuts in a pan over a clear fire, and stir them occasionally. When the skin opens at the place where it is slit try if the chestnuts are done, and serve them on a dish in a napkin. Butter and salt should be handed round at the same time.

Bouillon for Afternoon Teas.

Hot bouillon is simply the clearest beef soup which can be made; beef tea, it is sometimes called. It is made, says Harper's Bazar, the day before, and a little celery seed is thrown in to flavor it. Then the soup is set away to cool, and all the grease taken off. It is then strained, and thus being perfectly clear, is seasoned with a little salt, heated, and served hot in cups; it is delicious at afternoon teas. It should be kept hot in a silver urn over an alcohol lamp.

Old Fashioned Soda Biscuit.

To make flaky soda biscuit mix together a quart of dry flour, a teaspoonful of baking soda, two of cream of tartar, and a saltspoonful of salt; pass through a sieve, then chop in two ounces of butter or lard, and mix quickly with milk to make a very soft dough. Flour the board well, roll out, sprinkle with flour, double over and roll out again; cut into biscuits half an inch thick. Bake in a very hot oven about fifteen minutes.

Spanish Cream.

Soak half a box of gelatine in a half pint of cold milk; beat up the yolks of three eggs and put into a double boiler with a pint of milk, three teaspoonfuls of sugar and the soaked gelatine. Stir well, let it come to a boil, then remove from the fire and flavor to taste. Beat the whites of the eggs to a stiff froth and stir them in with the other ingredients and pour into a buttered mold. Serve with cream.

To Stone Raisins.

Pour boiling water over them and let them stand five or ten minutes. Drain and rub each raisin between the thumb and finger till the seeds come out clean. Dry the raisins before using and rub them in flour before putting into cake, to prevent their sinking to the bottom. If chopped, flour should be scattered over them to prevent their adhering together.

Tapioca Blanc Mange.

Into a cup and a half of boiling milk stir a pinch of soda and half a cup of sugar. When these are dissolved add one half cup of tapioca which has been soaking all night in a scant cupful of cold water, slightly salted. Stir until clear, watching closely that no lumps form. Flavor, and mold in wet tumblers.

Linen Press Satchet.

The scented cushion for a linen press shown in the cut is made of a roll of perfumed cotton wool, which is first covered with plain material drawn in at both ends.



SCENTED CUSHION FOR LINEN PRESS.

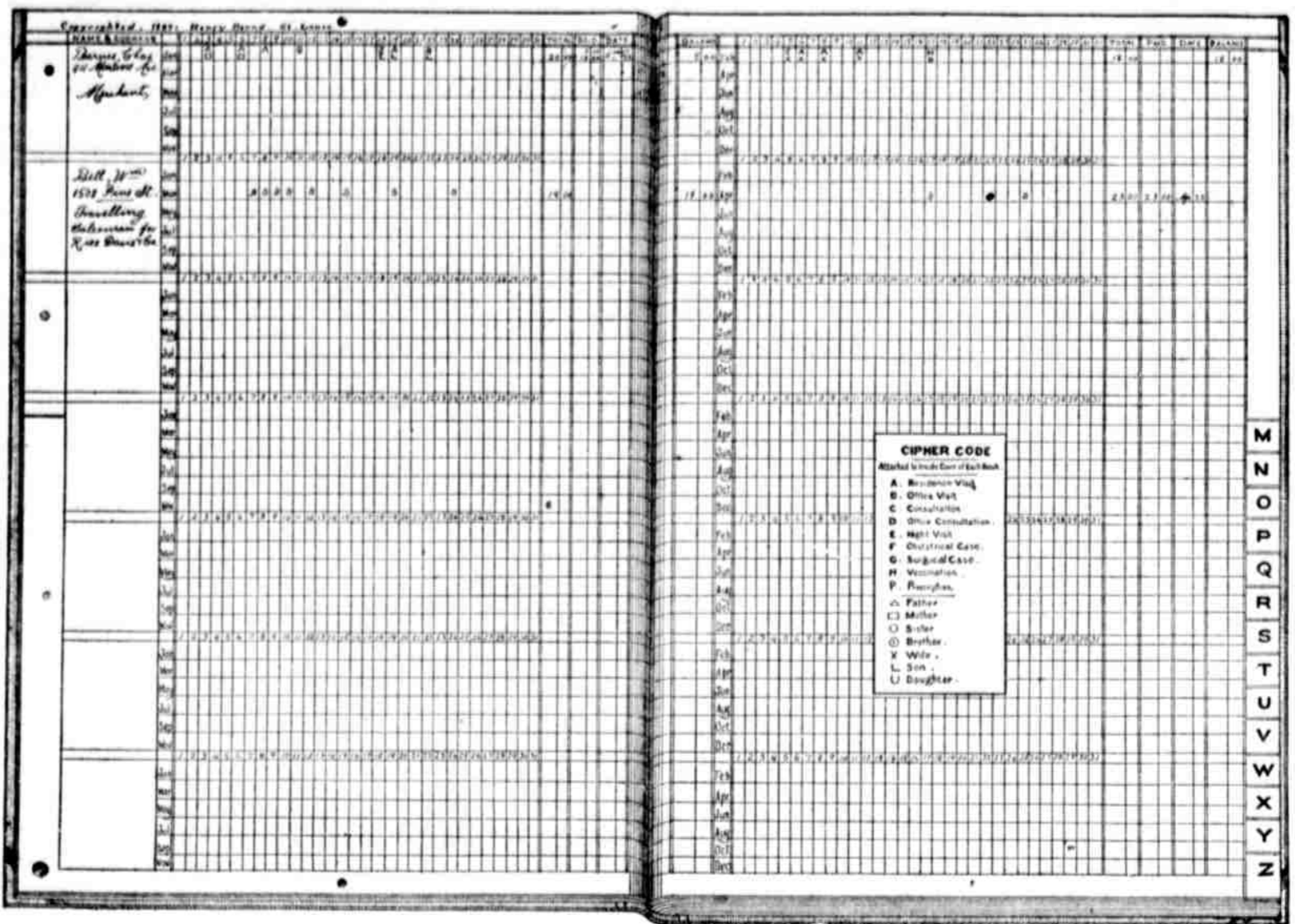
The embroidery is worked separately on a piece of Holbein linen in cross stitch, Holbein and satin stitch with blue cotton. After the roll has been mounted with the embroidery, blue tassels on white cords, blue silk bows and lace ruches are fixed to both ends.

Plant Stimulants.

If you wish a good stimulant for house plants supply them well with liquid manure water. If you cannot obtain this, you will find the same from the weekly wash of great advantage for making flowers grow. The effect is remarkable.

A BOON TO PHYSICIANS.

Bernd's Physician Office Register



The above cut shows Register open. The book is prepared with especial reference to improving the system of recording calls, visits, etc. It is complete, simple comprehensive, and as a labor saving method of keeping accounts, will at once commend itself to every Physician in the land. Your attention is called to the fact that the account against a patient for an ENTIRE YEAR is contained within a space three inches in width.

This book is 12x17 inches; contains 100 pages; each page divided into 7 spaces, thus providing for 700 accounts, contains a condensed cash account showing (on one page) cash receipts for both "regular" and "transient" patients for each day in the year, besides 4 additional ruled pages for memoranda, such as "the address of nurses, future engagements" "private consultations," etc., etc. The book is alphabetically indexed on linen tabs, substantially bound Russia back and corners, cloth sides, spring back, and nicely finished.

Prices, 700 Account Office Register, \$5.00. 1400 Account Office Register, \$8.00

BERND'S POCKET REGISTER.

Its Advantages are as Follows:

- 1st. No Posting—No Transferring—No Indexing.
- 2d. One Writing of Patient's name for entire year.
- 3d. It enables you to keep the run of your accounts without referring to auxiliary books.
- 4th. Can be commenced at any time during the year.
- 5th. The price is far below the cost of keeping accounts in the old style, viz: Visiting List, Journal and Ledger—this book combining all three.

This cut shows book open, with example similar to that shown above. Cipher code is embossed in gilt on inside of cover. The Register when closed is 4x7 inches, convenient size to carry in pocket. The lines of the short leaf are adjusted to the long. When the short leaf is turned to the right, the first half year is visible. The book is Gilt Edged, bound in Black Seal—flexible—with inside pocket and elastic tablet. Contains condensed cash account, showing at a glance Receipts from Regular and Transient Patients for entire year—besides eight Memorandum Pages, Pencil and Holder, and is closed by a Silk Elastic Band.

Extracts from a Few of the Many Letters Received,

- I am gratified to say that for the first time in long years of practice, I am able to keep my accounts, without having to suffer the drudgery of cumbersome book-keeping.—Dr. H. Tuholske, St. Louis.
- It is just the thing I want.—Dr. G. Swan, Hartford, Connecticut.
- The book is a treasure to any busy Doctor, it saves an amount of tedious work at the end of the month which is particularly agreeable.—Dr. E. A. Chapoton, Detroit, Michigan.
- I have lost enough this A. M. to pay for the book, having to make out an account in haste.—Dr. Jno. Boardman, Buffalo, N. Y.
- It is by far the most complete work of its kind I have ever met with—shall take pleasure in recommending it to my friends in the profession.—Dr. S. H. Chester, Kansas City, Missouri.
- I regard it as the only Register in use adapted to the Physician's requirements.—Dr. J. T. Kent, St. Louis, Missouri.
- For the past fifteen years I have used several kinds of Registers, all very good, but none beginning to compare with that purchased from you.—Dr. W. C. Barker, Hummelstown, Pennsylvania.
- I have found it useful and exceedingly convenient.—Dr. Benj. T. Shimwell, Philadelphia, Pennsylvania.
- I must congratulate you on the introduction of such a perfect method—every member of the profession should extend to you their appreciation by adopting the same.—Dr. Wm. Bird, Chester, Pennsylvania.
- I would not do without it for fifty dollars a year.—L. W. Clark, Rushville, Illinois.

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