

Scientific and Natural.

A DEADLY SPRING. A writer in the Colusa (California) Independent says:—"About half a mile over a mountain from Bartlett Springs there is what is called the Gas Spring. This is probably the greatest curiosity of the mountain. The water is ice-cold, but bubbling and foaming as if boiled, and the greatest wonder is the inevitable destruction of life produced by inhaling the gas. No living thing is to be found within a circuit of 100 yards near the spring. The very birds, if they happen to fly over it, drop dead. No experiment with a lizard on its destructive properties by holding it a few feet above the water; it stretched dead in two minutes. It will kill a human being in twenty minutes. We stood over it about five minutes, when a dull, heavy, aching sensation crept over us, and our eyes began to swim. The gas which escapes here is the rankest kind of carbonic, hence its sure destruction of life; also quenching of flame instantaneously."

SAVING ONIONS. I had great trouble in saving my onions until I adopted my present plan. As soon as the tops have died off, I have the onions pulled up and spread out in a high, clean place until they are perfectly dried, say ten days or two weeks, though a longer time will not hurt. I have them turned occasionally, especially after a rain. I have saved onions thus which have begun to decay before taking up. After being perfectly cured in this way, they may be taken into the house and kept in a dry place, either hung up or spread upon a floor.—Ex.

HEIGHT OF THE HUMAN SPECIES. M. Silberman shows the average height of the male and female population of France taken in a certain position which he names the "geometric," is 1.600040 meters, or two meters if in the same position the hands are comfortably extended over the head. Two individuals laid lengthwise, with fingers touching, would thus measure four meters, and this he terms the base of the harmonic proportions of the human race. Thus this harmonic base is four times one meter, just as the meridian is four times ten million meters, and the relations of the two integers is as 1 to 10,000,000. From these considerations he draws proof of the equality of the sexes, as they exhibit woman not as a complement to the male portion of the race, but as constituting normally and by right half of the human family. M. Silberman arrives at the conclusion, as the result of his various investigations and studies, that the average height of the human race has remained unchanged since the Chaldean epoch, 4,000 years ago.

OVER-REACHING IN HORSES. This unpleasant noise, known only by the term "clicking," arises from the toe of the hind foot knocking against the shoe of the forefoot. In a trot, one fore-leg and the opposite hind-leg are first lifted from the ground and moved forward, the other fore-leg and the opposite hind-leg remaining fixed; but to keep the centre of gravity within the base, and as the stride or space passed over by these legs is often greater than the distance between the fore and hind feet, it is necessary that the fore-feet be moved alternately out of the way of the hind-feet to descend. Let the smith shoe your horse behind as usual—no clipping, rasping or shortening beyond what is usual; but to prevent clicking, cut off the toe or crust of the shell of the hoofs on the fore-feet, placing the heel calls in their proper place, and you will have no clicking.—Cor. Country Gentleman.

STRENGTH OF MATERIALS. It is a most remarkable fact that the most abundant material in nature, iron, is the strongest of all known substances. Made in the best steel a rod of one-fourth of an inch in diameter will sustain 6,000 pounds before breaking; soft steel, 8,000 pounds; iron wire, 6,000; iron, 4,000; inferior bar iron, 2,000. Cast iron, 1,000 to 8,000; copper wire, 3,000; silver, 2,000; gold, 2,500; tin, 800; cast zinc, 100; cast lead, 50; milled lead, 200. Of wood, box and locust the same size will hold 1,200 pounds; toughest ash, 1,000; elm, 800; beech, cedar, white oak, pitch pine, 600; chestnut and maple, 400. Wood which will bear a heavy weight for a minute or two will break with two-thirds the force acting a long time. A rod of iron is about ten times as strong as hemp cord. A rope an inch in diameter will bear about two and a-half tons, but in practice it is not safe to subject it to a strain of more than one ton. Half an inch in diameter the strength will be one quarter as much; a quarter of an inch one sixteenth as much; and so on.

HOW THE CHICKEN GETS OUT OF THE SHELL. Take an egg out of a nest on which the hen has set nearly her full time, carefully holding it to the ear; turning it around, you will find the exact spot on which the little fellow is picking on the inside of the shell; this he will do until the inside skin is perforated, and then the shell is forced outward as a small scale, leaving a hole. Now, if you will take one of the eggs in this condition from under the hen, remove it to the house or other suitable place, put it in a box or nest, keeping it warm and moist, as near the temperature of the hen as possible (which may be done by laying it between two bottles of warm water upon some cotton or wool), and lay a glass over the box or nest. Then you can sit or stand, as is most convenient, and witness the true modus operandi. Now watch the little fellow work its way into the world, and you will be amused and instructed, as I have often been. After it has got its opening, it commences a nibbling motion with the point of the upper bill on the outside of the shell, always working to the right (if you have the large end of the egg from you and the hole upward), until it has worked its way almost around, say within one-half an inch, in a perfect circle; it then forces the cap or butt end of the shell off, and then it has a chance to straighten its neck, thereby loosening its legs somewhat, and so, by their help, forcing the body from the shell.—American Farm Journal.

New Advertisements.

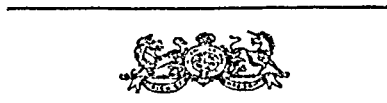
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INSOLVENT ACT OF 1869. CANADA Province of Ontario } In the County Court of the County of Simcoe. In the matter of Della Wilson, Individually and as one of the firm of Fran. & Co., of Grifflin in the County of Simcoe, Debtor. The undersigned filed in the office of this Court a deed of assignment and its terms, executed by her creditors, and on Tuesday the third day of November next she will apply to the Judge of the said Court for a confirmation of the discharge thereby effected. Dated at Grifflin, in the County of Simcoe, this 29th day of September, A. D. 1874. DELLA WILSON, by Bigelow & Hagel, Her Attorneys ad litem

INSOLVENT ACT OF 1869. Canada, Province of Ontario, } In the County Court of the County of York. In the matter of Thomas Hill, in the City of Toronto, in the County of York, an Insolvent. On Tuesday, the tenth day of November next, the undersigned will apply to the Judge of the said Court for a discharge under the said Act. Dated at Toronto this sixth day of October, A. D. 1874. THOMAS HILL, by BIGLOW & HAGLE, His Attorneys ad litem.

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APPLICATION WILL BE MADE TO the Ontario Legislature of the Province of Ontario, at its next session, for an act to enable the four following Churches, namely:—The Presbyterian Church of Canada in connection with the Church of Scotland, The Canadian Presbyterian Church, The Presbyterian Church of the Maritime Provinces in connection with the Church of Scotland, and The Presbyterian Church of the Lower Provinces, which purpose to unite in one Church under the designation of "The Presbyterian Church in Canada," to hold after the union, the property of the various congregations, collegiate institutions, and the other trusts connected with the said Churches, in the same manner as it is now held by the respective Churches, and in so far as it lies within the Province of Ontario. Dated, 16th Sept., 1874.

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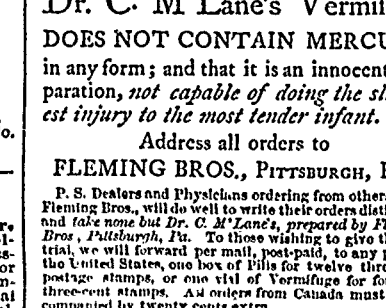
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DEATH LOSSES.....\$416,600 00 Paid for Surrendered Policies..... 159,628 24 Paid Return Premiums..... 335,401 17 Paid Matured Endowments..... 7,960 00 Total amount returned Policy-holders..... \$909,459 41 Assets, \$8,000,000; Surplus at 41 per Cent., \$1,253,971. This Company unites absolute safety to low cash rates; it is economical in management, and returns readily all surplus revenues to its Policy-holders. Its liberal fortunes are equalled by few Companies, and excelled by none. J. H. MCNAIRN, General Agent, Temple Chambers, Toronto St., Toronto

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