

TAPPING ROCK FOR WATER

Baron Nordenskjöld's Theory Leads to an Important Discovery.

Baron Nordenskjöld's system of boring for fresh water through the granite rocks of Sweden has now been in operation for two years. The Geographical Journal says that 44 wells have been bored. This is not alone a question of finding water, but of the discovery of a new and important principle.

The difficulty in obtaining good drinking water at many of the pilot and light stations on the rocky islets off the Swedish coasts first induced Nordenskjöld to consider the subject. He believed from his researches in Spitzbergen that a horizontal crack would generally be found to exist in all solid rocks at an insignificant depth beneath the earth's surface. Consequently in the Swedish rocks he concluded that water would be found by boring to this crack. The only places where there was any prospect of such borings being undertaken were on out of the way rocks and islets, where water was so much needed.

In order to solve the problem Baron Nordenskjöld as early as 1885 inquired respecting the saltness of water in wells or mines near the seacoast and collected some important information. He was told that several wells in sedimentary strata near the seacoast yielded water free from salt, although the springs are at depths of 100 to 250 feet below sea level. The information he collected, though far from conclusive, appeared to point to the fact that water obtained by boring on rocky islands would not be salt or brackish, but fresh drinking water.

Nordenskjöld therefore proposed to the chief of the pilot stations that he should allow an attempt at boring to be made at some suitable station. The first boring took place in 1891 on the little island of Svängen, south of Kosterfjorden. It was abandoned after reaching a sufficient depth, because a long crack was reached extending from the sea to the boring hole. It was next taken up in May, 1894, by Baron Runth, the general director for pilots, who, regardless of the unsuccessful boring at Svängen, caused a second experiment to be tried at Arko. The site selected was a flat place near the pilot station, the rock being composed of hornblende, gneiss and diorite. The results were very satisfactory.

As soon as a depth of about 100 feet was reached they came to excellent water, yielding 600 quarts an hour. At first the water was a little yellow, owing to clay in the cracks of the rock, the stone dust and oil from the boring, but it soon became perfectly clear. Water has always been found at a depth of 90 to 125 feet, and similar borings have since been carried out successfully at 44 different places. At first the water is mixed with the clay from the cracks, the stone dust and the oil from the machine, and it is some time before all the dirty water is pumped away, but soon it becomes as clear as crystal. At Stockholm it has a temperature of about 43 to 45 degrees F.

The boring in hard, close rock would probably have the same results in other countries. Baron Nordenskjöld is convinced that wherever hard, close rock exists, with variations in temperature and not permeable, water will be found in the same way as in Sweden, and in the same quantity—that is, from 600 to 2,000 quarts an hour—with moderate pumping. Sites for such borings could be found, for example, on many parts of the north coast of Africa, in Abyssinia, in South Africa, in Spain and other parts of the western Mediterranean, at the foot of Mount Sinai, in Greece and Asia Minor and in the dry waterbeds of the canyon of the Colorado. In the tropics, where there are dry seasons, such wells cannot supply water for extensive cultivation, but they will spring forth, free from all bacteria and impurities, and will suffice for household purposes, for small villages and for gardens. The practical importance of Baron Nordenskjöld's discovery entitles it to special attention.

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Men's High Grade Ulsters

A lot of fine black beaver Overcoats, made in the finest possible manner; silk velvet collar, best of trimmings and sewn with silk; a gentlemen's coat in every respect; a cheap coat at our former price, \$16 for \$11.

30 dark blue beaver Overcoats, s. b and d. b, velvet or cloth collar, former prices from \$8 to \$13.50, selling now from \$5 to \$9.

9 light drab melton Overcoats, s. b. fly front; the latest styles, selling price \$12 now \$7.50.

18 English nap Overcoats, barrel button, tweed lining, and storm collar; the Impress of style, price \$14.25, now \$7.75.

14 dark brown Canadian tweed Overcoats, s. b.; fly front velvet collar, a good coat with a good appearance, former price \$8.25, now \$5.60.

6 blue cloth Overcoats, extra value at \$5.25, now \$3.60.

6 diagonal black worsted Overcoats, astrakan collars and cuffs, former price \$14, now \$8.50.

10 black Paton Serge Overcoats, a good weight, suitable for spring or fall or under a fur coat, price \$10.60, now \$7.35.

Men's High Grade Ulsters.

Klondike—this is the name of our extra heavy black frieze Ulster, rubber lined, rendering it windproof, waterproof and frostproof, price \$16.25, now \$8.50.

Extra fine blue and dark brown Ulster, silk lined, with dust vents; a tailor made coat, a snap at \$12.50, now \$7.75.

A mixture of colored friezes of superior quality, will be sold at 1-3 less than price.

Light grey frieze Ulsters, heavy, all wool, nice leather outer, a perfect garment, price \$9.75, now \$6.25.

A lot of very stylish tweed Ulsters, worth \$32.50, now \$16.35.

A mixed lot of good all wool Ulsters, worth \$6.50 and \$7, now \$4.50.

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We have not very many men's Reefers left, extra fine goods. We promise startling values on these garments.

A lot of blue pilot Reefers, all wool, fast dye, worth \$9.50, now \$6.

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Children's, Boys' and Youths' Clothing.

The impulse of giving the best bargains and broadest values ever known has swept through our elegant lines of Ready to wear Clothing for the juveniles. In this department we have shattered the prices and upset all precedents in values.

Youths' Ulsters, worth \$10 for \$6.30.

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Youths' Ulsters, worth \$6.75 for \$5.25.

Youths' Overcoats, worth \$5.25, for \$3.55.

Youths' Overcoats, worth \$7.25, for \$4.85.

Youths' Overcoats, worth \$11, for \$7.60.

Youths' Overcoats, worth \$8.25, now \$5.75.

Youths' Overcoats, worth \$9, for \$5.50.

Youths' Overcoats, worth \$6, for \$3.65.

Youths' Reefers, worth \$5.60, for \$3.85.

Youths' Reefers, worth \$4.25, for \$2.85.

Youths' Reefers, worth \$4.50, for \$3.15.

Job lot of Reefers for \$2.60.

Children's Ulsters, worth \$4.50, for \$3.

Children's Ulsters, worth \$4.50, for \$2.60.

Children's Ulsters, worth \$5, for \$3.40.

Boys' Ulsters, worth \$6.35, for \$4.75.

Boys' Ulsters, \$6.50, for \$4.75.

25 assorted Overcoats, Children's, with caps and hoods, mixed qualities and prices, at half price.

Children's and boys Reefers, in naps and serges, at away below the marked price. Remember the above are all good goods; no cheap stuff palmed off, but the genuine article at less than shoddy prices.

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If you want a snap on Furs, act on the following suggestions—

Prairie Wolf Coat, worth \$18, for \$12.25.

Walabee Goat, worth \$18, for \$12.25.

Wombat Goat, worth \$16 and \$18, for \$12 and \$15.50.

Wombat Coat, worth \$23, for \$15.25.

We are overstocked and prefer to carry over your money rather than our Winter Goods. Therefore our entire stock of Ready-to-wear Clothing must go at prices lower than ever quoted before. Sale for Cash Only. Our Loss is your Gain.

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Application to Parliament.

Public notice is hereby given that application will be made to the Parliament of Canada, at the next session thereof, for an Act changing the name of The Dominion Building and Loan Association, Ltd. to The Dominion Permanent Loan Co. (Canada). Dated at Toronto, this 17th day of November, A. D. 1897.
MACDONALD, BOLAND & THOMPSON
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Solicitors for Applicants

HOUSEHOLD HINTS.

Vaseline makes the best dressing for russet shoes.

Hot breads and cakes should be cut with a warm knife.

After washing never wring, wringed dress-goods. Shake them.

To clean a sewing machine cover all the bearings with kerosene, run the machine rapidly a few minutes, then with a soft cloth remove all the kerosene and apply machine oil.

For the sickroom a simple disinfectant is made by putting some ground coffee in a saucer and in the center a small piece of camphor gum. Light the gum with a match. As the gum burns allow the coffee to burn with it. The perfume is refreshing and healthful, as well as inexpensive.

FLOWER AND TREE.

Minnesota's forest region is 330 miles long and 200 wide. Yet there are hardly any white pines left and their days are numbered.

Roses discovered in tombs containing Egyptian mummies often have their colors perfect, even though some of those found must be over 3,000 years old.

It is said that in York County, Me., there is a tree which grew through the hole of a grindstone and now wears the stone as a collarette well up the trunk.

The death plant of Java has flowers which continually give off a perfume so powerful as to overcome, if inhaled for any length of time, a full grown man, and which kills all forms of insect life that come under its influence.

Baseball Batting.

The ideal batter puts into his stroke, first, body motion; second, upper arm motion; third, forearm motion, and fourth, wrist motion. The stroke begins with a strong body swing, which is followed by the motions of the upper and fore-arm respectively, and ends with a short, quick snap of the wrists. Although this is the analysis of the ideal stroke, it is not precisely the one that I would recommend for the majority of amateurs. To get all the motions to their full extent against good pitchers requires an ability to judge the ball more quickly and accurately than amateurs, with few exceptions, can do. The wrist and arm motions can be controlled more easily and quickly than the body swing, so that if most of the latter is left off the batter has a greater chance of judging the ball accurately. I therefore think, as accuracy is absolutely essential, that batters should be coached to use but little body swing. In other words, they should be coached not to "slug" and try for home runs, but to meet the ball squarely for line singles. When you see a batter, as I often have, strike at a ball, and from the force of the stroke be turned completely around, you have seen one who is guilty of two breaches of correct batting principles. First, having entirely sacrificed the important arm and wrist motions, he has, with stiff arms and wrists, depended entirely upon a powerful body swing. And, second, he has lost his balance and therefore all batting form. It will be well to bear in mind that against any pitcher a good, clean hit can be made, even without any body motion, if the ball be hit squarely and with a quick arm motion and snap of the wrists.—Harper's Round Table.

His View of Our Women.

According to the Rev. Dr. F. E. Clark, American women are thus referred to by the Swami Vivekananda, the Hindoo who was so popular with women while he was in this country: "When a woman tries her best to find a husband, she goes to all the bathing places imaginable and tries all sorts of tricks to catch a man. When she fails in her attempts, she becomes what they call in America an 'old maid' and joins the church. Some of them become very 'churchy.' These churchwomen are awful fanatics. They are under the thumb of the priests there. Between them and the priests they make a hell on earth. They make a mess of religion. With the exception of these the Americans are a very good people. They loved me so much. I loved them. I felt as though I was one of them."—New York Tribune.

The Occult.

The Orient—But you will not deny that our attainments in occult science at least far surpass yours.

The Occident—Occult? Say, right in my own town there's a fortune teller that I'll back against anything that ever came down the pike. Why, she's the seventh daughter of the seventh daughter of the seventh wife of a seventh husband.—Detroit Journal.

THE WHOLE system feels the effect of Hood's Sarsaparilla—stomach, liver, kidneys, heart, nerves are strengthened and SUSTAINED.

Stock taking sale for two weeks at Weeks & Co. Big discounts 20 to 50 per cent discounts. Call for bargains. See our advertisement.—W A Weeks & Co. 72