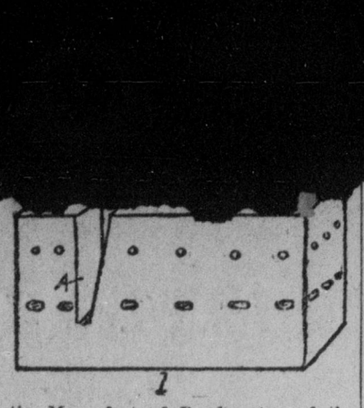
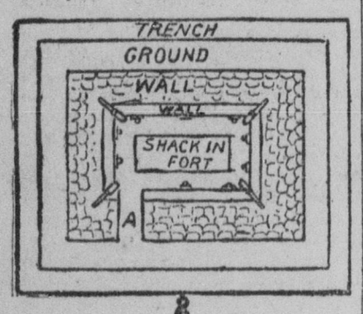


the Moro fort of Pandupatan of the Sultan of Bayan on the Island of Mindanao offered the resistance it did to the American attack, which was made with the assistance of a field battery. The fort looked like any other Moro fort, but the Americans lost many men in trying to get into it.

Many forts, stockades and intrenched positions of the Moros had very promptly surrendered to our column in the march from the sea to the lake country in the interior. There were



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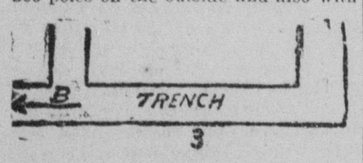
many fortified places, because the entire lake region is divided up among Sultans and Dattos, each with his following and fortification.

In fact about every house is a fort. There are trenches about it and stone walls and bamboo stockades. In each house thus protected live a Datto and his immediate family and working force of slaves, who cultivate the lands and care for the stock. Every fortified place is supplied with one or more old cannon, a few small guns and many homemade bamboo cannon, spears, bolos, &c.

Our first view of Fort Pandupatan occurred shortly after the taking of a large stockade in the Bayan district. The little fort, which was to cause us so much loss, looked much like any other Moro fort.

In a general way the fort was a square inclosure. The walls are of stone, earth and bamboo and about twelve feet thick at the base. They are some fourteen feet high.

These walls are covered with bamboo poles on the outside and also with



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an immense entanglement of thorny brush both on the sides and the top. This brush made the fort look easy to take, as the stone walls did not show.

The walls of stone and loose earth neatly and tightly piled and packed have many portholes and the fighting Moro seemed to have a cannon or a rifle at every porthole and their shooting proved to be effective.

The Moro engineers had also constructed two trenches about the fort of considerable depth. One trench was crowded with desperate Moros who had taken the oath of their tribe to die facing the enemy. I can certify that practically every Moro in that trench kept his oath.

They fought our officers and enlisted men on the edge of the trenches, in the trenches and everywhere. It was shoot, cut, bite, throw rocks, and yell for fully thirty minutes. By that time the Moros in the trenches were all dead, but our loss was heavy. Three or four of our officers were wounded and some twenty-five of our soldiers were killed and wounded.

The shooting from the fort continued all this time. The inner side of the walls is several feet lower than the outer and affords a position from which the Moros could fire at our men without exposing themselves to return fire.

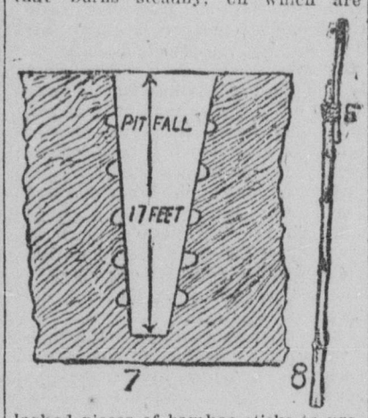
There were several "lantakas" or cannon arranged to shoot from the portholes at the sides and ends. In fort was protected by heavy wooden barred doors during the fight.

The designers of most Moro forts take the precaution to make a passage by which the garrison can retire if need be. In this case the mode of retreat seemed to be through an underground passage from the fort to the lake. There was also a passage which led from the main trench. During the first part of the fight I remember that a few Moro soldiers escaped through this trench to the open field and then ran to the bush.

The cannon of the Moro fort consisted chiefly of bronze lantakes with a bore of about an inch and a half. These cannon were slung up on beams or arranged in portholes.

This crude arrangement might amuse one under ordinary circumstances. This time every piece of ordnance of the enemy was made to do such execution that we cannot ridicule the devices. Of course it was the very close range that made these pieces effective.

When the cannon were suspended by ropes the gunners had to maintain the aim by holding the cannon in its proper alignment during the discharge. The torch used to fire the cannon consists of a piece of native wood that burns steadily, on which are



lashed pieces of bamboo sticks to protect the hand.

The projectile used in these cannon consists of a series of pieces of thin bamboo or strips of leaves bound in cylindrical form about pieces of metal, glass, pebbles, &c. These cartridges are about four inches long.

I saw some of these projectiles with tacks, screws, slugs, &c., in them. After the battle our surgeons cut materials of this kind from many of the wounded.

Several men and two or three horses fell into pitfalls. The depth of these pitfalls is about seventeen feet. One man who fell in cut steps on the sides and thus worked his way to the surface.

Such was the fort that defied the Americans from the middle of the afternoon until daylight the next

morning. About 5.30 a. m. the Moro flag had disappeared and a white flag was in its place.—New York Sun.

An Advertising Result.

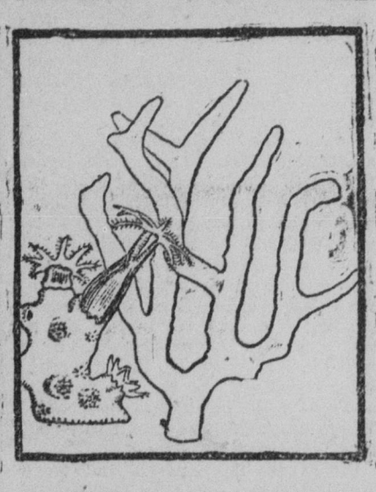
A lecturer on advertising says that a century ago a firm had to do business for a generation to become widely known and trusted, but by modern advertising methods a house can achieve the same result in a few years. Constant advertising and honest dealing will build up a high reputation.

Wishbone Sweetmeat Tongs.

An English novelty is a pair of sugar tongs shaped like a merrythought, and made of solid silver.

A man can always square himself without resorting to cube root.

SPECIMEN OF LIVING CORAL WITH POLYPS EXPANDED AND RETRACTED.



PRECIOUS CORAL—A BRANCH IN OUTLINE AND ENLARGED VIEW OF POLYP FULLY EXPANDED.

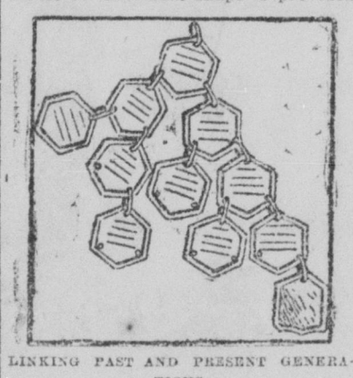
LARVAE ESCAPING FROM MATERNAL POLYP.

that used in jewelry, is found only in the Mediterranean, where it is gathered in the rocky bottom at depths of from twenty-five to sixty feet, though occurring also even down to 1000 feet. Important fisheries exist on the southern coast of Italy, on the island of Penza, off the Gulf of Gaeta, on the coasts of Sicily, Corsica and Sardinia, on that of Algeria, south of Sardinia, and other places. At some of these the reefs are divided off into ten parts, only one of which is fished annually, ten years being considered sufficient for the proper growth of the coral.

Collectively, corals constitute a well-defined natural group of several subgroups of distinctive peculiarities. These, naturalists have classed according to their characters under various heads, that to which precious coral (Corallium rubrum) belongs, being called the Alcyonaria, a name derived from Alcyone, the fabled daughter of Aeolus and wife of Ceyx, who, inconsolable for the death of her husband, flung herself into the sea.

In this tribe the so-called polyps, the minute animal organisms that construct the corals, have a body of a more or less cylindrical outline, which internally is divided by longitudinal partitions into eight compartments, each of which is surmounted by a fringed tentacle or feeler capable of being agitated in the water. The mouth, situated in the centre of the space surrounded by these tentacles, opens into a stomach, which, at its lower end, communicates freely with the interspaces between the eight partitions before mentioned, and these open below into a series of canals, which pervade a rather thin substance that covers the article we call coral, and are continuous with other like canals belonging to other polyps connected with the same mass, or polypary, as it is called.

Into this covering material or cortex



LINKING PAST AND PRESENT GENERATIONS.

to make prominent the owner's name, and each record contains space for the main facts of the person's history. If desired a card system can be used in addition, a number on each tablet referring to a corresponding card, where a complete history in detail can be recorded.

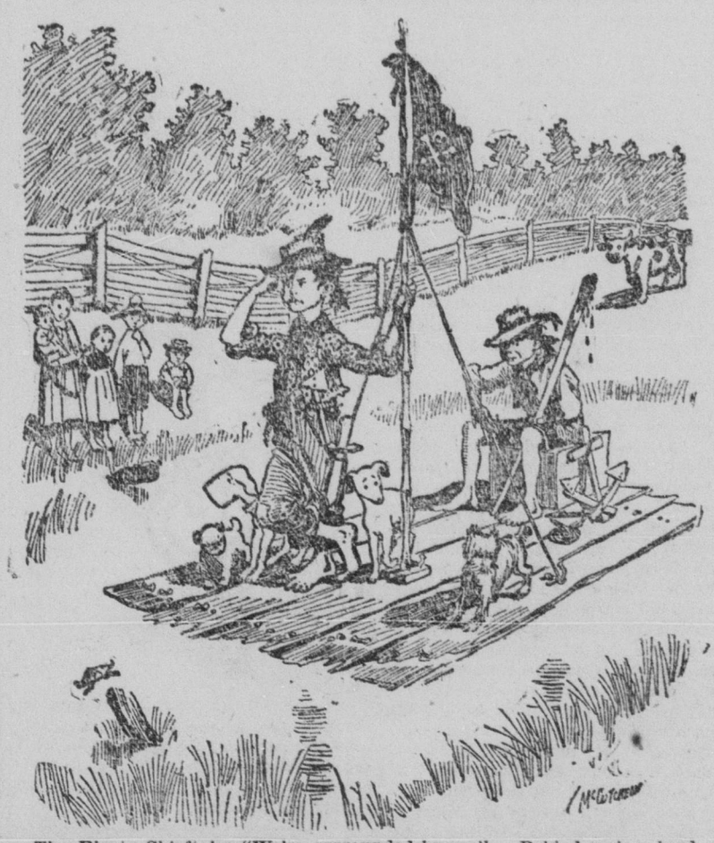
Using the Newspapers.

For years railroad lines have been advertised mostly by booklets, folders, circulars and the like, using the newspapers only for time table. Recently several managers have used newspaper space for display advertising, and one says that soon all the companies will reduce or abandon other forms of publicity in favor of the newspapers.

There are still over twelve per cent. of Belgian soldiers who can neither read nor write.

ONE OF THE DELIGHTS OF BEING A BOY,

AS DEPICTED BY JOHN McCUTCHEON IN A RECORD-HERALD CARTOON.



The Pirate Chieftain: "We're surrounded by perils. Behind us is a herd of wild buffaloes, on one side is an unfriendly shore swarming with hostile natives, and in front of us are breakers and deadly reptiles."

POPULAR SCIENCE

Soundings have shown that the ocean basins are comparatively steep sided and flat floored. The greatest depth yet found is 31,614 feet, in the Western Pacific, near the island of Guam (latitude twelve degrees forty-five minutes north, longitude 145 degrees forty-five minutes east). Another place of great depth, 30,930 feet, is in the Pacific, near the Fiji Islands. The deepest sounding yet made in the Atlantic is 27,366 feet, or over five miles, in a local depression 100 miles north of Porto Rico, West Indies.

It is always cold at the bottom of the sea, the influence of the warm surface currents not extending below 100 fathoms. In the greater depths the temperature is always close to the freezing point. In the tropics the difference between surface and bottom temperatures is frequently more than forty-five degrees. From 100 fathoms down, or throughout the waters beyond the influence of the sun, temperatures remain practically unchanged. The low temperature there is due to the cold water from the Polar regions, which sinks and gradually spreads itself over the ocean bed.

Dr. Victor Vaughan, of Ann Arbor, Mich., at the annual meeting of the American Medical Association, read a paper in which he said that the sterilization of milk, as ordinarily carried out, and even the Pasteurization of it, is not desirable, but that perfectly fresh milk from the cow, with certain common-sense modifications, is the best food for the baby. The high death rate from summer diseases among children, which continues, notwithstanding the sterilization of milk, he attributes to failure in sterilization. Our aim should be, he says, to take care of the milk and prevent its contamination. Many leading physicians express similar views.

The United States Consul-General at Berlin sends to the State Department some interesting details of the recent trial of high-speed electric motors by the Prussian State Railway Administration. The track used had been put in thorough repair, and at ordinary speed everything worked perfectly, but when a speed of eighty-one miles an hour was reached and exceeded new and serious conditions were encountered. The rails and ties both proved too light for so great a strain; the track began to give way and the side swaying of the cars increased seriously. The highest speed attained was ninety-nine miles an hour on two occasions, but, as the result of conditions then developed, the experiments were discontinued. Up to a speed of eighty-one miles an hour, however, they proved successful and satisfactory.

Much attention is now being given in many States to the subject of contagion among the children of the schools, and every effort on the part of health boards and the school authorities is making to impress the child with the importance of cleanly habits. The Providence (R. I.) Board of Health has sent a circular letter to the teachers in the public schools asking that they teach the children the importance of observing the following rules: "Don't spit, either on the slate, the floor or the sidewalk; don't put the fingers in the mouth; don't pick the nose; don't put a pencil in the mouth or moisten it with the lips; don't wet the finger with saliva in turning the pages of a book; don't put money of any kind in the mouth; don't put pins in the mouth; don't swap with other children anything that is put into the mouth, such as apples, candy, chewing-gum, whistles or bean-blowers; don't cough or sneeze, while facing another person; wash the face and hands often.

Woes of the Newly Rich.

Reports from all the summer resorts say that the one conspicuous result of the country's great prosperity has been to send a small army of the newly rich to the exclusive resorts, where they are crowding out the old summer visitors. Nothing so impresses one brought in contact with these get-rich-quick families as the remarkable manner in which the maternal head of the houses accustoms herself to the new conditions. No matter what her former station, in nine times out of ten she will grace the drawing room with an elegance and charm supposed to be acquired only through generations of wealth and culture. The men, on the other hand, seldom change to any great extent. If they have been accustomed to eating with their knives they usually continue to do so, and the fact that silver now supplants steel adds relish to the operation. Nowhere is this illustrated better than at the summer hotel. How really pathetic it is to see some smartly gowned matron vainly endeavor to make her husband appear as though he had been coming down to dinner in a tuxedo all his life, and what a series of frowns, coughs and nudgings there is if perchance he so far forgets her warnings as to tie his napkin around his neck.—New York Press.

Advertising is Educational.

That advertising creates business has been demonstrated by the success of the men who have put new articles on the market. As one experienced business man has said: "Advertising is educating the public continually and each new advertiser finds a more intelligent and responsive people to hear his argument."—Philadelphia Record.

Genealogical Chain Record.

Any one who has ever made the attempt to trace their family record knows that there is a curious fascination about it, and it is with considerable pleasure that each link is discovered which connects the present with time long past, especially if it be found that some ancestor held a prominent position in affairs, either as a statesman, soldier or business man. Numerous devices have been thought out for the convenient recording of the names and history of these ancestors, the chief difficulty being that in bringing all branches of an ancient family down to the present the branches are so numerous that it is hard to join them all to the one head in a form easily traceable. Pattie Williams Gee has designed a system of links and tablets which is practically limitless as to length and number of names which may be recorded, an illustration of the idea being presented herewith. In tracing in a direct line the tablets are connected one to the next by small rings or links, the branches being indicated by additional tablets attached at intervals around the tablet. One tablet of individual shape is provided

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A year ago last June I was troubled greatly with indigestion after meals. Often upon retiring at night I would be seized with dizziness, which often kept me awake for hours. I was recommended to take Ripans Tabules by one of my friends who had himself found use for them. I immediately found relief in their use, and have since had no return of my complaints.

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The Five-Cent packet is enough for an ordinary occasion. The family bottle, 60 cents, contains a supply for a year.

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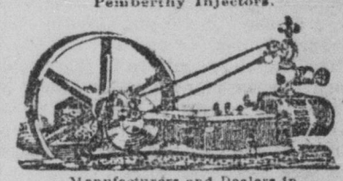

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