

BEST DIVING DRESS

American Invention Infinitely Superior to All.

New York Man Seems to Have Revolutionized Process of Investigation of Wrecks That Lie Many Fathoms Below Surface.

Several years ago, after a number of distressing accidents, the British admiralty determined to make some scientific tests in the hope of eliminating certain dangers to which the naval divers were exposed in service. Without going into details, but by using double the number of air pumps and adopting several important precautionary measures, they did succeed in sending down two unusually fit men to a depth of 210 feet in the sheltered water of a landlocked bay, points out Robert G. Skerrett in the Scientific American.

Now keep the next fact in mind. In descending, bottom was reached in two minutes, and after a stay of 5 1/2 minutes the men were slowly brought back to the surface, the ascent taking 50 minutes! This was required to insure safe decompression and to guard them against any ill effects of their great submergence.

In the American idea, the all-metal armor, the men were lowered to the water bed in a trifle over three minutes, being held when about a hundred feet down to see that the telephone was working properly.

After being on the bottom for ten or more minutes the divers were hoisted up and out upon the deck of the parent steamer in less than a minute and a half.

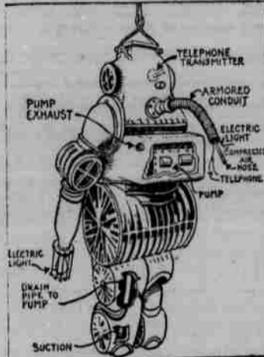
Why was it possible to do this in the latter case and not with the British admiralty divers?

Simply because the American divers were not subjected to the hydrostatic pressure of the enveloping water, and were able to breathe air at atmospheric pressure. Their bodies were not subjected to abnormal stresses, and therefore no period of readjustment was necessary.

This innovation in the art of subaqueous enterprise is the result of some years of gradual evolution, and is the invention of Chester E. MacDuffee of New York city. The suit is made of an aluminum alloy of great strength, and even so weighs a matter of quite 480 pounds.

The articulated sections are clever adaptations of the sleeve or rotating joint, and, while suitably packed to reduce leakage to a reasonable minimum, still, thanks to roller bearings, give the diver ample freedom of action when the weight of the dress is taken up by the surrounding water.

Indeed, a certain amount of leakage is desired, for it serves to lubricate the moving parts and, too, to keep the packing swelled, and therefore more efficient. But how is the leakage disposed of? In a recess back of the main body or trunk of the suit is installed a powerful little pump with suction intakes located in each foot of



Back View of the Metal Man. The Left Hand Carries the Electric Light, the Right Hand the Two-Fingered Claw.

the dress. The discharge is immediately outboard and, of course, against the water head.

The pump is driven by compressed air, this exhaust is delivered into the suit, and thus meets the breathing needs of the diver. The air is led down through a small tube, together with the electric light and telephone circuits, which, in turn, are carried in a 2 1/2-inch armored rubber hose. The free space remaining in this big tube forms the channel back to the surface of the used air.

The diver has no life-line to bother with, and his telephone permits him to keep in constant communication with his surface attendants.

There ought to be no difficulty in carrying on operations at depths of 500 and more feet. Of course, the operator is entirely sheltered within his armored dress, and an ingenious mechanical hand is relied upon to grip and to make the necessary connections with suitable tackle or chain links.

Feminine Finance.
"Now, wifey, for a little lesson in finance. Do you know the value of a dollar?"
"I do not, but I know it takes at least \$40 to buy a presentable hat."

Neglected.
"This cotton advertisement is getting too absorbing. Why not encourage the iron trade, too?"
"Yes, why not start a buy-a-ton movement?"

SAVED BY AN INSPIRATION

Presence of Mind of French Soldier Saved His Life When Situation Seemed Hopeless.

In Napoleon's campaign in Russia one of his generals, Philippe de Segur, had a peculiar adventure with a band of Kalmucks. The Kalmucks are wandering tribes of southeastern Russia. They are fierce warriors, and their light cavalry forms an important part of Russian armies. De Segur's presence of mind saved him from being killed by them when the most desperate fighting could not have done so.

The French had attacked a body of Russians and put them to flight, when Segur suddenly discovered that he and a few French dragoons had become separated from the French army and were being carried away with the retreating party.

He and his men were surrounded by a band of Kalmucks. The situation seemed so hopeless that the men gave themselves up and, disregarding his orders, passively allowed themselves to be struck down. De Segur determined to sell his life dearly and continued to fight. A Kalmuck lance struck him from his horse. He jumped to his feet and, getting behind his horse, continued the struggle. It was a hopeless contest, however, and in a few moments he would have been killed had not a happy thought occurred to him.

The Kalmuck leader, a fine-looking Cossack, remained calm while his men were carried away with the fury of battle. The expression on his haughty countenance indicated that he scorned to murder a vanquished foe, and from time to time he called, "Nikale! Nikale!"

De Segur guessed that this was an order to cease fighting. He shouted impudently to the Kalmucks that surrounded him, "Nikale!"

Immediately the fury died out of their faces and they paused, motionless with astonishment. Their fury once checked, Segur's life was saved by their chief.

He learned afterward that the word meant "Do not strike," and that while the impetuous Kalmucks had not heeded the command of their chief, they were puzzled and disturbed at hearing this word from one whom they supposed to be an enemy.

De Segur was kept a prisoner until a peace between France and Russia was arranged some months later.

Aerial Scouts.

During the present war, the aeroplane has proved very useful in scouting; indeed, the heavier-than-air machine is generally admitted to be superior to the alrship for spying out the position of the enemy. The aeroplane is less conspicuous; it is faster; it makes a smaller target; it costs almost nothing to make in comparison with a dirigible balloon, and it can fly at a higher altitude. Sir John French pays a high tribute to the aeroplane scouts in one of his interesting reports on the campaign in France.

"One of the features of the campaign on our side has been the success of the Royal Flying corps. In regard to the collection of information, it is impossible to award too much praise to our aviators for the way they have carried out their duties, or to over-estimate the value of the intelligence collected, more especially during the recent advances." For the 20 days that ended on September 10, the English aviators averaged nine reconnoissances a day of over a hundred miles each—Youth's Companion.

Coyote Invades a Home.

Coyotes have been committing many depredations in Crook county, according to a letter from Mrs. Fannie Morris, of Post. One night the family of J. R. Knox was awakened by an unusual noise upstairs. Mrs. Knox went into the yard and could see a coyote tearing and biting at the window of the upstairs room in an effort to get out. Mr. Knox shot the animal.

An investigation showed that it had got into the house through a bedroom window downstairs, the tracks being plain on the bed that it had climbed over. The animal went through several rooms before going upstairs.

Mrs. Morris says that there have been many reports of rabid coyotes in that section, and that few go out after night without being well armed.—Cottage Grove (Oreg.) Dispatch to the Portland Oregonian.

The Gallant Gordons.

Rising, roaring, rushing like the tide, Gay goes the Gordon to a fighting the post of the Gordon Highlanders, who have suffered severely in the fighting in France. To the credit of the regiment stand the capture of the Dargal heights, in the Tirah campaign of 1897, and the rush through the sheet of lead which helped to sweep the Boers off the ridge of Elands-laagte in 1899. In the desperate 26-hour struggle on Waggon Hill the following January when the fate of Ladysmith hung in the balance, the Gordons had their full share of the fighting under the stalwart Miller-Walnutti, "a man cast in the mold of a Boerish viking," says Sir A. Conan Doyle.

Another Waggon Hill on a small scale there was toward the end of the war, when at Retz they put up a magnificent and successful defense under terrible punishment against 500 Boers.

Modern Education.

"How is your little boy doing at school?"
"He gets a good mark in the toothbrush drill and stands first in the breathing class, but he isn't so smart at learning arithmetic."

Fundamental Principles of Health

By ALBERT S. GRAY, M.D.

(Copyright, 1914, by A. S. Gray)

VITAMINE FOODS.

The fundamental difference between plants and animals is in their methods of feeding. Plants are essentially constructive and work up for themselves the simplest inorganic elements into food. Animals, on the other hand, are essentially destructive and can make use of these same elements only by destroying the combinations arranged by the plants and recombining and extracting them in such forms as are absolutely useless for animal food until they are once more worked up by the plants. All the carbohydrates, the starches and sugars, all the nitrogen compounds and the proteins, are ultimately provided for the whole animal world by the plant world. Obviously, we have here a cycle analogous to cycles to be found everywhere throughout nature, from which we may—but seemingly will not—learn. In this cycle the animal is found to be parasitic, and man is about the most hopelessly parasitic of all, because his sublime egotism blinds him to the fact that he is but a single link in an incomprehensible chain of universal life.

In our ignorance we have presumed to interfere with nature's plans, with dire results, and only very recently have we generally begun to suspect that the key to the solution of our serious ills, both physical and social, and covering disease, poverty and crime, is to be found in a comprehension of the subject of nutrition. Very obviously, then, the study of nutrition is worth while and must begin at the foundation, with the breathing and drinking of plants and their reactions to light, heat and gravitation.

Eykeman in 1892 called attention to a peculiar relationship between beri-beri and polished rice, and he followed it up from time to time for some fourteen years. Gryn joined in the quest in 1910, and in 1911 Fraser and Stanton quite definitely proved that the curative layer of rice contains a substance which cures beri-beri in man and the polyneuritis that is produced in birds by feeding them on polished rice. Then Casimir Funk in 1911 isolated from the material ground from the surface of rice in polishing it a definite crystalline body with which he cured polyneuritis induced in pigeons by feeding them on ordinary polished rice.

Funk named this substance "vitamine," because it constitutes a substance in foods indispensable to life. The vitamins are contained in the hard, colored shell that is ground off rice to produce a nice white product, and it is in the hard protective coat of the wheat berry which constitutes about 15 per cent of the grain. The bran of the milling process, as removed by the steel rolls, includes the aleurone layer, together with the pericarp, the testa and the germ; these are starchless but rich in fats and minerals, and besides they contain the newly discovered vitamins.

The vitamins are nitrogenous bodies of highly complex structure and no diet is complete without them. Vitamins are found in plants, and especially in their seeds. So far as is known at present, animals are incapable of making them and obtain them only by feeding on plants. Vitamins occur in meat, fresh milk and in the yolks of eggs. They are found in whole grains, potatoes, carrots, beans, peas, lentils and the like; also in lime and in other fresh fruit juices.

Vitamins are destroyed by exposure for from ten to twenty minutes to a temperature of 250 to 265 degrees Fahrenheit and also by exposure to extreme dryness. Cattle may suffer from a vitaminless diet following a long drought.

Wherever any cereal robbed of its colored aleurons or vitamin layer forms the chief food of a people, there a deficiency disease appears. The chief increase of beri-beri, caused by eating polished rice and resulting in thousands of deaths annually in Japan and other countries, coincides with the replacement of the primitive stone grinding by the modern steel roller process. The stone mills ground the entire grain; the modern rolls enable the miller to reject from the flour practically everything but the starch.

A diet largely composed of sterilized milk, condensed milk, corn flours, starch and sugar, or of any foods subjected for a long period to temperatures above 250 degrees, may be considered vitaminless diet, and, as such, will predispose to tuberculosis and the deficiency diseases.

White flours, corn flours and polished rice are deficient foods, because the vitamins have been removed in the milling process. But in the face of all the proof we still have amateur and political "experts," some of them in high places, who persist in stating that white flour and polished rice are safe and healthful foods. White flours and polished rice are pure foods, but they are not wholesome foods, because they are not complete.

HIS HAPPINESS IN DANCING

Footwork Did Not Bother Anxious Pupil, but Rather Wanted Professor to Teach Him Holds.

Daniel G. Reid, the New York capitalist, smiled when reference was made to the modern dances. He said he was reminded of the chief concern of a party named John Henry.

John Henry wished to wise himself on modern dancing, and went to a well-known professor for instruction. At the first lesson the pupil didn't show any great aptitude, and several times the instructor was compelled to call a halt.

"Just a moment, sir! Just a moment!" he intervened, for the tenth time. "That will never do."

"What's the matter?" responded John Henry. "Am I getting things a bit twisted?"

"Yes," answered the professor, "you must watch your footwork if you wish to learn the dances."

"That's all right, professor," cheerfully returned the pupil. "You needn't bother about the footwork. Just teach me the holds."—Philadelphia Telegraph.

A Problem in Etiquette.

A red-faced, awkward young man approached an usher at a church wedding the other day and timorously slipped into his hand a package tied with a red ribbon.

"What's this?" asked the usher, suspiciously.

"Oh, that's the present for the bride."

"But you shouldn't bring it here, my friend!"

"Shouldn't?" he replied timorously. "That's what this ticket in my invitation says. See here!"

The usher's eyes were moist as he read: "Present at the door."—Judge.

NO WORK ABOUT IT.



"Dat's a mighty short stub yer smokin', Weary."

"Yep! I know it; 'dat's de way I allers like 'em; you don't hev ter pull de smoke so fur!"

Placing the Blame.

S. Oftus—I say, you remember that chair you sold me the other day—told me it came over on the Mayflower?

Antiquary—Yes, sir.

S. Oftus—Well, there's a Chicago factory stamp on the bottom of it.

Antiquary—Dear, dear! you don't tell me! I'm afraid, sir, that some of our pilgrim forefathers were sad rascals!—Judge.

Up-to-Date Version.

"Warfare nowadays is not what it used to be."

"Perhaps not."

"For instance, the monarch who shouted 'A horse! A horse! My kingdom for a horse!' caught in a similar predicament in a modern battle would probably shout, 'My kingdom for a motor car!'"

Cause for Curiosity.

"How did you like my latest poem?" inquired Tennyson J. Daft, the versatile versificationist, angling for a compliment.

"What was it about?" returned J. Fuller Gloom, the deservedly unpopular misanthrope.

"Why, didn't you read it?"

"Oh yes. That is what aroused my curiosity."—Judge.

Militant Advice.

"What must I do, mother? Mr. Dumdy won't take 'No' for an answer and continues to annoy me with his attentions."

"My daughter, I don't believe in women using force, as a rule, but in a case of this kind I hope you are not a champion basketball player for nothing."

Social Welfare.

First Barroom Politician—Say, Bill, wot's this bloom'n' mortuarium they're tarkin' so much about?

Second Politician—Well, ye see, it's like this: You don't pay nothin' to nobody and the government pays it for ye.

First Politician—Well, that sounds a bit of all right, don't it?—Punch.

Fashionable Penmanship.

"Looks like a futile transaction all round."

"What are you kicking about now?"

"This fad for large handwriting. My daughter got a box of expensive paper from a young man and used it all up writing him a note of thanks."—Judge.

A Patriotic Frenchman.

"Say, what's the matter with my breakfast?" asked the restaurant patron, after a long wait.

"I'm very sorry, sir," answered the waiter, "but the chef's reading the war news."

The Secret of Health is Elimination of Waste

Every business man knows how difficult it is to keep the pigeon holes and drawers of his desk free from the accumulation of useless papers. Every housewife knows how difficult it is to keep her home free from the accumulation of all manner of useless things. So it is with the body. It is difficult to keep it free from the accumulation of waste matter. Unless the waste is promptly eliminated the machinery of the body soon becomes clogged. This is the beginning of most human ills.

DR. PIERCE'S GOLDEN MEDICAL DISCOVERY

(In Tablet or Liquid Form)
Assists the stomach in the proper digestion of food, which is turned into health-sustaining blood and all poisonous waste matter is speedily disposed of through Nature's channels. It makes men & women clear-headed and able-bodied—restores to them the health and strength of youth. Now is the time for your rejuvenation. Send 50 cents for a trial box of this medicine.

Send 31 one-cent stamps for Dr. Pierce's Common Sense Medical Adviser—1008 pages—worth \$2. Always handy in case of family illness.

Address: Dr. J. C. Pierce, Buffalo, N. Y.

Decoy Periscopes Used.

Such things exist as decoy periscopes—short lengths of pipe held upright on a float and looking exactly like the real periscope. The submarine sets them adrift for you to find—sometimes scatters several of them.

When one is sighted you can not stop to consider whether the little object dancing on the sea half a mile or so distant does or does not mean 250 pounds of high explosive coming straight at you. Maybe you will see an aeroplane maneuvering over it in a way that carries conviction that it does. You don't dare to take any chances, and so you train all the guns at it.

Then the real submarine slips up on the other side of the ship, and with the swift rush of its torpedo the latest of sea tragedies comes to an end.—The Independent.

Appropriately Named.

"What do you call your bulldog?" the visitor asked the farmer.

"Nabe!"

"A curious name for a dog. Why do you call him that?"

"Wait until a tramp comes along and I'll show you."—Birmingham Age-Herald.

You Can Get Allen's Foot-Ease FREE. Write Allen S. Olmsted, Le Roy, N. Y., for a free sample of Allen's Foot-Ease. It cures sweating, hot swollen, itching feet. It makes new or tight shoes easy. A certain cure for corns, ingrowing nails and bunions. All drug stores sell it. 25c. Don't accept any substitute.

Small by Comparison.

"These war expenditures are simply terrible."

"Well, it's an ill wind that blows nobody any good," opined the congressman. "People won't be so inclined to notice the little billion dollars we appropriate."—Louisville Courier-Journal.

Little Left.

"I'm glad I saw the sights of the world while I could."

"What do you mean?"

"Half Europe is in ruins, and now I hear they've closed the stockyards in Chicago."—Louisville Courier-Journal.

RESINOL HEALS RAW, ITCHING, SCALY SKINS

No matter how long you have been tortured and disfigured by itching, burning, raw or scaly skin tumors, just put a little of that soothing, antiseptic Resinol Ointment on the sores and the suffering stops right there! Healing begins that very minute, and in almost every case your skin gets well so quickly you feel ashamed of the money you threw away on tedious, useless treatments.

Resinol Ointment and Resinol Soap clear away pimples, blackheads, and dandruff. Prescribed by doctors for 19 years and sold by all druggists.

Pleased.

"Your wife's tastes are literary, and not musical," said the inquiring relative.

"Yes. And that's lucky. I'd rather she'd sit up till midnight reading a book than sing songs or play the piano."—Washington Star.

Another Delusion Destroyed.

An English newspaper says that it is a common delusion that red uniforms are more conspicuous in the field and more dangerous when armies fought at close range, but are said to be less easily seen at a distance of 1000 yards than steel gray or other light shades.—Exchange.

American Coin in Canada.

According to figures published by the Monetary Times, of Toronto, the sum total of American investments in Canada was \$56,904,000 in 1913, as compared with \$417,143,000 in 1911, and \$270,075,000 in 1909.—Toronto Mail and Empire.

YOUR OWN DRUGGIST WILL TELL YOU Try Murine Eye Remedy for Red, Weak, Watery Eyes and Granulated Eyelids; No Stinging—Just Eye Comfort. Write for Book of the Eye by mail free. Murine Eye Remedy Co., Chicago.

Light in Water.

At 530 feet below the surface of the water the amount of illumination is about the same as that on the surface, on a clear but moonless night.

American Fountain Pens.

American made fountain pens command about 80 per cent of the market for conveniences of their kind in Great Britain.

Oldest Grass.

Rye grass is believed to be the oldest grass specially raised for forage, having been thus cultivated in England more than two centuries ago.

Dr. Pierce's Pellets, small, sugar-coated, easy to take as candy, regulate and invigorate stomach, liver and bowels. Do not gripe.

By extreme thrift a divorcee lives on \$20,000 a year. Hubby still wins. She spent \$50,000 a year before the divorce.

Ford's Anthropology.

"Study a child's character," said Henry Ford. "Note his proclivities. Then choose a trade or a profession for him accordingly."

"I sent a little boy out the other day with a quarter to make a small purchase for me. On his return he told me the article I desired was out of stock and handed back my quarter—in the form of two dimes and a nickel."

"This boy, of course, is cut out for a waiter."—Philadelphia Bulletin.

TYPEWRITERS, ALL MAKES

Large assortment. Special Prices. REBORN and REBUILT. \$15 to \$100. Machines shipped on approval and guaranteed by Home Concern. Write for samples of work, stating make preferred.

TYPEWRITER EXCHANGE, 351 1/2 Wash. St., Portland, O.

NEW HOTEL HOUSTON

Dave Houston, Prop. H. R. Thomson, Mgr. Thoroughly modern. 101 Rooms of comfort. Moderate Prices. Three minutes' walk from Union Depot. Write for rates. 72 1/2 S. 3d St., PORTLAND, O.

TYPHOID

is no more necessary than 5 millipox. Army experience has demonstrated the almost miraculous efficacy, and harmlessness, of Antityphoid Vaccination. It is vaccinated NOW by your physician, you and your family. It is more vital than house insurance. Ask your physician, druggist, or send for "Have you had Typhoid?" telling of Typhoid Vaccination, results from use, and danger from Typhoid Carriers. THE CUTLER LABORATORY, BERKELEY, CALIF. PRODUCING VACCINES & SERUMS UNDER U. S. GOV. LICENSE

Open to Suspicion.

"What is your idea of a pedant, anyhow?"

"Well, it is sometimes rather difficult to say who is a pedant and who is not, but I think you would be reasonably safe in suspecting a person of pedantry who speaks of hair and whiskers as 'hirsute adornment.'"—Birmingham Age-Herald.

A Retreat.

"And you call this your music room?"

"Yes," replied Mr. Cumrook. "But there are no musical instruments in it."

"No. It's so constructed that I can't hear any of the surrounding music that may be turned on from time to time."—Washington Star.

Electricity for Korea.

The Japanese government is investigating the possibilities of developing power for the industrial needs of Korea by hydroelectric plants.

Styles in Grub.

"What can I do for you, mum?" asked the grocer.

"I hardly know," said the lady who was doing her first marketing. "What are they eating this fall?"—Kansas City Journal.

Helping Kidneys

By Clearing Blood

A Function Greatly Assisted

By a Well-Known

Remedy.



Most readers will be interested to more clearly understand why analysis of urine is so important. In the use of S. S. S. to purify the blood, its action is a stimulant to the myriad of fine blood vessels that make up the constructive tissues of the kidneys. All the blood from all over the body must pass through the kidneys. They act as testers and assayers. And according to what they allow to pass out in the urine, both as to quantity and materials, the health of the kidneys and the quality of the blood is determined. The catalytic energy forced by S. S. S. is shown in the urine. It is also demonstrated in the skin. And as the blood continues to sweep through the kidneys the dominating nature of S. S. S., acting as it does through all the avenues of elimination, shows a marked decrease of disease manifestations as demonstrated by urine analysis. This assistance is a great relief to the kidneys. The body wastes are more evenly distributed to the excretories; their elimination is stimulated by the tonic action afforded the liver, lungs, skin and kidneys. Thus, in cases of rheumatism, cystitis, chronic sore throat, hoarseness of voice, bronchitis, asthma and the myriad of other reflex indications of weak kidney action, first purify your blood with S. S. S., so it will enable the tissues to rebuild the cellular strength and regain the normal health.

S. S. S. is prepared by The Swift Specific Co., 527 Swift Bldg., Atlanta, Ga., and if you have any deep-seated or obstinate blood trouble, write to their Medical Dept. for free advice.

P. N. U. No. 51, 1914

WHEN writing to advertisers, please mention this paper.