FROM EOHIPPUS TO MAUD S.

The Little Animal That Was the Progenitor of the Horse.

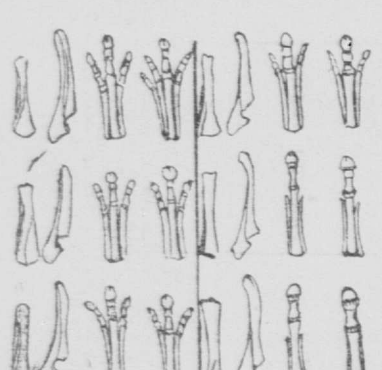
A Glance Down the Ages to the Time When Man's Useful Friend Was But a Very Insignificant Little Creature.

Written for THE MORNING CALL.

There was once a little animal, no larger than a fox,
And on five toes he scampered over tertiary rocks.
They called him eohippus, and they called him very small,
And they thought him of no value—when they thought of him at all.

Probably any one of us, could we have seen this small quadruped of the early eocene, would have been inclined to coincide with the estimate in which he was held by his confreres, the dinocerus, the coryophodon, the loxolophodon and all the other "heavy aristocracy of ages long ago," but these having passed away, relegated, like many another heavy aristocracy, to the high shelf of remote antiquity, little eohippus, developed into the horse—now commands our respect, our admiration and pride as the most useful and valuable to man of all the lower animals. When we see him to-day, graceful, exquisitely balanced, clean-limbed, strongly muscled, with his 15 hands 2 inches of average height, flowing mane and long tail, swiftly trotting over a mile track, bending every energy to win the honor of a low mark from other contestants, it is hard to believe that our American trotter was once a little five-toed animal, picking up his living on the prehistoric plains, with doubtless little ambition beyond securing his share of the eozoic pasturage and scampering into hiding when his enemies approached.

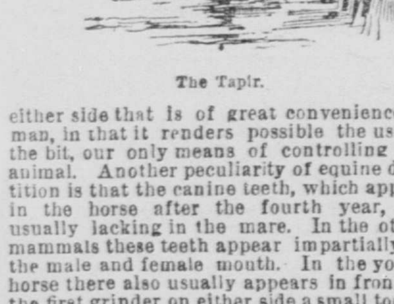
From eohippus to Maud S is a tremendous stride. Perhaps the evolution of man alone equals it in the story of creation; but tremendous as it is its history is clearly to be read, not only in the chronicles of the



How Eohippus Grew.

rocks but in the anatomical structure of the horse himself. This differs very materially from that of any other of the mammals. It is in the anatomical structure of the horse's leg that this difference is particularly noticeable, and a brief glance at this will be necessary to a clear understanding of our subject. To begin with, what is generally called the knee of a horse is in reality what in the human anatomy constitutes the wrist. The cannon bone corresponds to the middle one of the long bones (metacarpals) of the human hand. The pastern, or ankle-bone, answers to the first phalanx of the finger, the other two being represented by the "coronary" and "coffin" bones. Above the knee is the real forearm, which in man and the other quadrupeds consists of two bones, the ulnar and radius. In the horse there is apparently but one bone, the radius, though examination reveals the existence of a rudimentary ulna, anchylosed with the larger bone, yet distinctly traceable as separate in the very young foal. So in the hind extremity the hock is really the heel, the bones below that corresponding to the middle bones of the foot and the bones of the middle toe. The single bone of the leg is in combination with what was evidently at one time a distinct and separate fibula or smaller bone. Now, on either side of the cannon bone, which is the bone between the so-called "knee" and "ankle," appears in the horse of to-day what are called the "splint bones," long, slender processes of bone, terminating in points and lying close to the cannon bone. These are the remains of the second and fourth of the five toes upon which little eohippus scampered away from his enemies in early eocene. He had but four toes on the front foot in the miocene age and three behind. He was called miohippus then, and was as large as a sheep. The ulnar and fibular bones were still clearly defined, and in general appearance he resembled very nearly the tapir of to-day, from which we may infer that he was not a handsome beast. Still increasing in size the last of the miocene, and the dawning of the pliocene time found him with but three toes on his front foot and under the name of protohippus or hipparion. He was as large as the modern donkey, then with a longer neck, a handsomer head and a more gracefully turned form than had miohippus. The first and fifth toes had disappeared entirely, and his legs and teeth had undergone important changes.

It is in his teeth as well as in his limbs that the horse differs widely from the other mammals. These are admirably adapted for their work of preparing rapidly and well the food upon which the horse lives. Such sharp, cutting teeth, such powerful and wonderfully adapted grinders are not found in any other animal. The latter are very large and exceedingly complicated in structure, being composed of a number of substances of varying degrees of hardness, so that the surfaces wearing away at different rates are always uneven and in good grinding condition. The twelve incisors are closely set in the front part of the mouth, and, with their sharp, chisel-like edges, are powerful tools (and can be used as dangerous weapons when occasion requires), the wearing of which forms up to the eighth year a pretty good index of the age of the animal, and there is a large space between the last incisor and the first molar on



The Tapir.

either side that is of great convenience to man, in that it renders possible the use of the bit, our only means of controlling the animal. Another peculiarity of equine dentition is that the canine teeth, which appear in the horse after the fourth year, are usually lacking in the mare. In the other mammals these teeth appear impartially in the male and female mouth. In the young horse there also usually appears in front of the first grinder on either side a small tooth, which soon falls out, or is pulled out by the veterinary dentist—so that equus of to-day has usually less than the complement of 44 teeth that served eohippus in the early eocene.

Pliohippus followed hipparion in the pliocene age with the merest "dew claws" of second and fourth toes. He was literally then trotting on his middle finger nail, which is what the hoof is, and he was speedily followed by equus, with his shapely hoof and single bone in forearm and leg, who stood 15 hands 2 inches high, and of late days has come to trot a mile pretty close to 2 minutes.

A curious circumstance is observable regarding the discoveries of fossil remains of the prehistoric horse. For years the backward record stopped with the orohippus, an animal of the eocene period, with four complete toes on the front limb, three on the hind limb, with a well developed fibula and tibia, and simple teeth. Back of this creature, the scientists knew, must be the earlier five-toed animal, but where to look for him they knew not. A few years since, however, from the lowest eocene deposits of Western America have been dug the remains of eohippus, the early five-toed ancestor from which the pedigree of the horse is traced. The significence of this discovery lies largely in the locality in which it was made. It had all along been supposed that the horse was not a native of America. It is a matter of history how the early Mexican Indians stared in wonder and amaze at the vision of the Spanish invaders, mounted upon unknown beasts, who bore them fast and far and increased their powers manifold. It is a fact that there were no horses on this continent when the Spaniards landed, yet here are the earliest known remains of the creature from which they sprang; here the disappeared animals, again introduced, became at once acclimated and multiplied rapidly and strongly, and on this continent it is that equus under cultivation has attained his highest degree of perfection and his highest mark of achievement.

The evidences in this matter, according to Professor Huxley, tend to show that we must look to America, rather than to Europe, for the original seat of the equine series. When, how and why he disappeared are facts in paleontology that research has not yet revealed.

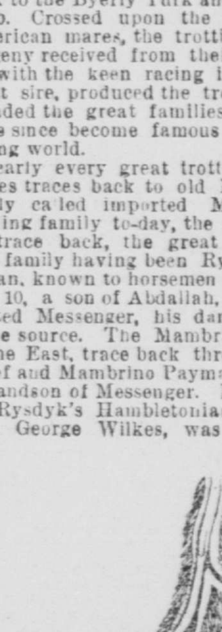
From the same family in which the horse originated sprang also the tapir and rhinoceros, the characteristic anatomical structure of the animal being only a modification of the general plan of these creatures, but the horse, and its distant cousins, the ass, zebra, quagga, etc., form a small group entirely distinct from all others of the class mammalia.

Of these only the horse and the ass, the two members most widely differing of this family, have been domesticated by man, from which fact it has been popularly deduced that the others were not susceptible of domestication. It is not likely, however, that this is true. We have no means of knowing with what difficulty the horse was at first subdued by man, and his thousands of generations of service for the human family have probably greatly altered his natural wildness and rebellion.

Were the horse and the ass to be by any means exterminated, there is no doubt but that man's necessity for beasts of burden would cause him to put forth efforts and devote time to the subjection of the zebra and other creatures for whose services no necessity now exists, and it is equally probable that under cultivation these creatures would develop as remarkably as the horse has done, and become as generally distributed as the present domestic animals now are. That distribution is almost universal. The records of literature scarcely go back to the time when the animals were not used by man. The conquering Roman legions introduced them pretty nearly over the then whole civilized world, and it is evident to all readers of history that the horse was known to the Aryans long before the period of their dispersion. We have records of horse-racing in the Iliad, and the development of the noble animal seems to have engaged the attention of man from the earliest days. It is even of nursery-tale fame how the Arab loves his horse, and stories of the Barb and Arabian horses flood our literature. It was the introduction of these into England that gave the great impetus to horse breeding and racing among that sportsmanlike people that has established the name and fame of the English thoroughbred. I do not mean that England had not, even before that, carefully selected and cultivated breeds of horses, but the racehorses of England, either on the turf or in the stud, trace their ancestry in direct male line to some one of these Eastern horses, the Byerly Turk, the Darley Arabian and the Godolphin Arabian or Barb. In fact, the blood of all three is probably combined in every English racer. These three horses were all imported during the reign of William III, and the most famous of all is the Darley Arabian, from whom the very best of the thoroughbreds are descended. A thoroughbred in England is a horse or mare whose pedigree is registered in the studbook of the Jockey Club. Our American thoroughbreds are descendants of these, imported from that country. Thoroughbreds are runners, no one of them having ever made a trotting record.

The horse was introduced upon this continent by the early Spanish arrivals, and as said before, the fact of his taking so kindly to the conditions of life here is a point in favor of his supposed American origin. The trotter is pre-eminently an American institution, although the trotting horse has attained a high development and trotting matches are very popular both in Germany and in Russia. It is to the United States, however, that the world is indebted for the development of extreme speed in the trotting horse. The interest in this industry dates from the importation to this country of the great throughbred horse Messenger, who was brought to Philadelphia from England in the latter part of the last century. Messenger was a gray stallion, by Mambrino, his pedigree on the dam side tracing back to the Byerly Turk and the Godolphin Barb. Crossed upon the colder-blooded American mares, the trotting instinct his progeny received from their dams, combining with the keen racing instincts of the great sire, produced the trotting racer and founded the great families of trotters that have since become famous throughout the racing world.

Nearly every great trotter in the United States traces back to old Messenger, generally called imported Messenger. The leading family to-day, the Hambletonians, so trace back, the great modern head of that family having been Rysdyk's Hambletonian, known to horsemen as Hambletonian 10, a son of Abdallah, who was by imported Messenger, his dam tracing to the same source. The Mambrinos, so popular in the East, trace back through Mambrino Chief and Mambrino Paymaster, the latter a grandson of Messenger. Electioneer was by Rysdyk's Hambletonian. Guy Wilkes' sire, George Wilkes, was from the same



Section of a horse's foot.

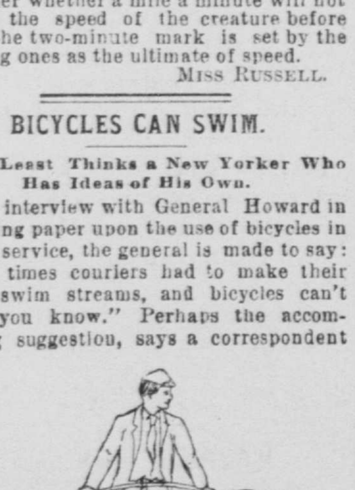
great sire. The great Sidney, whose phenomenal babies have done so much for California's fame, inherits the blood of Messenger through the great Hambletonian Clay courses. Nutwood, one of the greatest living sires, is a son of Belmont, who was sired by Abdallah, the son of Messenger. Stamboul, Axtell, Anteeo, all trace back to Messenger, and so does the famous little mare Sunol, although she has received, on the dam side, a liberal infusion of thoroughbred blood as well. Whether Sunol has achieved her great speed by virtue or in spite of her thoroughbred blood, is a question upon which horsemen disagree and a woman certainly will not decide. Maud S, who has reached the climax for attested speed in a regulation mile, is a granddaughter of Hambletonian 10, her sire, Harold, having been a son of that great descendant of old Messenger; and Nancy Hawks, Delmarch and Clingstone, the mare, stallion and gelding who trotted the fastest mile races in harness during 1891, are respectively granddaughter, great-grandson and grandson of Rysdyk's Hambletonian. In fact the great trotters are few, if any, who have not sprung nearly or more remotely from this great fountain head of trotting pedigrees. The development of the horse in the past 100 years is considered something remarkable, but when we come to compare equus with eohippus we begin to wonder whether a mile a minute will not yet be the speed of the creature before whom the two-minute mark is set by the knowing ones as the ultimate of speed.

MISS RUSSELL.

BICYCLES CAN SWIM.

So at Least Thinks a New Yorker Who Has Ideas of His Own.

In an interview with General Howard in a morning paper upon the use of bicycles in courier service, the general is made to say: "Many times couriers had to make their horses swim streams, and bicycles can't swim, you know." Perhaps the accompanying suggestion, says a correspondent



of the New York Sun, may convey a hint to lovers of long-distance bicycling. Why could not an oblong pair of cork pads, covered with canvas, similar to the life-preservers on ferry-boats, be attached to the sides of the saddle of a bicycle? When the rider arrived at a stream he could plunge in, his pads would rise to the surface of the water and he could cross by churning with his feet with quite as much ease as a horse swims. The pads, of course, should be large and buoyant enough to support the weight of the rider and his outfit.

No Superhuman Strength, but Natural Vigor.

To attain the muscularity of the individual who snaps steel shackles like twigs by simply bending his arm is vouchsafed to few. But to acquire a reasonable amount of physical power and constitutional energy, to eat, sleep and digest well, to possess an equable, quiet nervous system, is possible to the nervous, enfeebled and dyspeptic invalid who begins and pursues a course of Hostetter's Stomach Bitters. The fruition of his hopes is not remote either. Speedily felt are the tonic effects of the inimitable invigorant, and they are no less permanent than prompt of attainment. The bowels, the liver, the stomach, the kidneys—all co-operate, under the benignant influence of this comprehensive medicine, to insure those stable guarantees of health, harmony, regularity, vigor of action. Never was there discovered a medicinal motor better calculated to actuate and keep moving the main springs of healthful vitality. Use it for malaria, rheumatism, indigestion, biliousness, kidney complaint, la grippe. 24

A VENERABLE RACE.

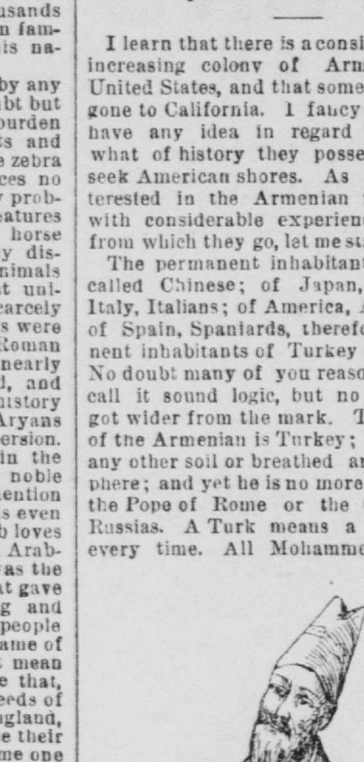
The Armenians Emigrating to This Country.

Why They Leave Their Native Land—Oppressed by the Mahomedan Ruler of Turkey.

Correspondence of THE MORNING CALL.

I learn that there is a considerable and an increasing colony of Armenians in the United States, and that some of them have gone to California. I fancy that very few have any idea in regard to this people, what of history they possess or why they seek American shores. As one deeply interested in the Armenian race, and also with considerable experience in the land from which they go, let me state a few facts.

The permanent inhabitants of China are called Chinese; of Japan, Japanese; of Italy, Italians; of America, Americans, and of Spain, Spaniards, therefore the permanent inhabitants of Turkey must be Turks. No doubt many of you reason this way and call it sound logic, but no reasoning ever got wider from the mark. The native land of the Armenian is Turkey; he never knew any other soil or breathed any other atmosphere; and yet he is no more a Turk than is the Pope of Rome or the Czar of all the Russias. A Turk means a Mohammedan every time. All Mohammedans are not



An Armenian.

Turks, but all Turks are Mohammedans, and an Armenian is neither the one nor the other; neither are they Greeks nor Jews nor Koords. They are simply Armenians.

Now, as I have made plain what they are not, let us see then what they are. Two thousand years before Columbus turned his attention toward a western world, when the powers of Babylon and Assyria and Media and Egypt were struggling for supremacy in this eastern world; when England had yet a decade to its birth, and Germany and France and Russia were such only in protoplasm, the Armenians were making history in the land of the Urarda and Biarra, and were reckoning their genealogies to Noah and Ararat, which stood within their territory as a silent witness to the truth of their records. Apart from the Jews, there is no nation that lays claim with more justice to hoar antiquity.

The Armenians, in their own language, never refer to themselves as Armenians; in fact they have no such word. They call themselves Haik after their first king, who, their many national histories declare, was the son of Toganmah, the son of Gomer, the son of Japheth, the son of Noah. The name "Armenians" was given them several centuries later, after one of their kings, Armen, who lead them with great valor against the Assyrians. But space will not permit me to go into these details. This much will conclusively prove that it is no modern race.

They were strong in war and formed alliances with Cyrus the Great, Darius III, and later with Rome itself. The records of these various peoples, with whom and against whom they warred, contain much of Armenian history. But their location was most unfortunate. On the east was Persia with its burning desire to enlarge its borders; on the south proud Assyria, seeking to bring tribute from the fastnesses of the north; on the north were the Barbarian hordes, constantly making assaults upon their territory; later came the Greeks and Romans from the north; and, finally, the Arab power from the south and the Turkomans from the steppes of Russia, succeeding in stamping out the last spark of national life that remained to poor Armenia, and it fell, crushed by superior forces, doomed henceforth to live as a remnant of a proud people amid its conquerors.

It was the first people as a nation to accept Christianity. In the time of Christ—so runs their history—their King, who then resided at Edessa, the modern Oorfa, only a few days' journey from Palestine, became a Christian and compelled his subjects to be baptized. But he subsequently apostatized from the faith and persecuted the Christians so that they were completely crushed out. In 301 A. D., through the exertions and instrumentality of Gregory the Illuminator, the King of Armenia, with a great concourse of nobility, was baptized, and from that day the Armenian Church has been a term coextensive with the nation. It has been terribly persecuted, but the blood of its martyrs has only tended to cement the national bonds. The church still is Christian, true to its ancient faith and forms of belief, but sadly degenerated. It practices as a national body in the midst of the Orient have turned the church from the simple gospel of Christ. Ages of ignorance and superstition have drawn the church away from its primitive Christian life.

The Armenians live in Turkey, but are no part of its government. They have no voice in affairs of state and hold no office, though when no Turk of sufficient ability can be found an Armenian is sometimes called in. Only recently the Secretary of the Treasury at the capitol was an Armenian, who most ably filled the office for a remarkably long term for this country. They are not taken into the army because they are not Mohammedans, but are required to pay heavy taxes to the Government, which in return does for them as little as possible.

They are largely farmers, artisans, merchants and bankers. Throughout this vast territory, in which possibly 2,500,000 Armenians dwell amid about five times their number of other nationalities, of whom the largest part are Mohammedans, they are pre-eminently the merchants and bankers. In many regions nearly the entire banks and trade are in their hands. Their only rivals are the Greeks, who are found in larger numbers toward the west. As farmers they largely till the soil of feudal lords, giving them all they demand as their share of what is left after the Government has taken its portion. They show ability when they have a chance, but generations of deep subjugation, oppression and abuse have tamed their proud spirits and made them less independent.

During the past few years oppression upon the part of the ruling race has become more and more severe. At the same time the eyes of the Armenians have been opened by a more liberal education, which has given a spirit of deep unrest. They read in newspapers of other countries, of freedom and safety for property and person, and they are thereby made discontented. While this change has been in progress among the Armenians taxes have been increased while the demand for labor has decreased.

Many a man supports his family upon daily wages of from 9 to 12 cents. He boards himself and has no permanent work at even that price. At the same time he pays to the Government a soldier's tax alone of from $2 to $10, according to the size of his family. How can such a man hope to educate his family? Why, they must begin to follow the plow or the herds even while almost in infancy in order to keep the wolf from the door.

There is no prospect that these conditions will change. The hearts of the Beys do not soften; the taxes of the Government increase; there are no factories or railroads building (I speak of the section of country about Harpoot); no mines are being opened; no new industries are forming. The poor farmer knows that if his children do not starve they must live as their father lives, and rear their children in the same way. Is it any wonder that the poor man, when he hears of a country in which the daily wages are more than he ever received for two weeks' work and more than he averages for a month, and that too with freedom and safety, that he mortgages his house and every article he possesses in the world to take him to that land? Sometimes he does the same to send a son or a brother who will send back his earnings that those here may live. There are also political questions touching the relations between the Turks and the Armenians which lead many to go from this country.

The state of the case is simply this: Extreme poverty here, with starvation staring them in the face; with no hope that the conditions will change for the better in the near future; with wife and children, or parents, or brothers and sisters looking to them for food and raiment and shelter to cover their heads; with an education to be provided for the rising generation. Thus it is that hundreds of young men are almost driven away from Turkey toward America, and yet the Government forbids them to go and uses every means in its power to keep them here. Hundreds who attempt to escape do not succeed; many who do get away can tell thrilling tales of narrow escape and hardship. I saw a young man upon whose neck were the unhealed sores from the chains placed upon him on his return from his third attempt to escape from the country, and in that condition he was making arrangements to try it once more.

They do not go to beg or steal; they seek only an opportunity to earn a living in a free country. As a class they are industrious. Many of them have left home most reluctantly. These men come from an Oriental country; they are Christian in belief; they are susceptible to the power of Christian truths.

J. L. BARTON.

Harpoot, Turkey, May 15.

WHILE I LIVE BE TRUE.

Make me no vows of constancy, dear friend—
To love me, though I die, thy whole life long,
And love no other till thy days shall end—
Nay—it were rash and wrong.

If thou canst love another, be it so;
I would not reach out my quiet grave
To bind thy heart, if it should choose to go.
Love should not be a slave.

My placid ghost, I trust, will walk serene
In clearer light than gilds these earthly moons,
Above the jealousies and envies keen
Which sow this life with thorns.

Thou wouldst not feel my shadowy caress,
If, after death, my soul should linger here;
Men's hearts crave tangible, close tenderness,
Love's presence warm and near.

It would not make me sleep more peacefully
That thou wert wasting all thy life in woe.
For my poor sake, what love thou hast for me,
Bestow it ere I go.

Carve not upon a stone when I am dead
The praises which remorseful mourners give
To women's graves—a tardy recompense—
But speak them while I live.

Heap not the heavy marble on my head,
To shut away the sunshine and the dew;
Let small blooms grow there, and the grasses wave,
And raindrops filter through.

Thou wilt meet many fairer and more gay
Than I—but trust me, thou canst never find
One who will love and serve thee, night and day,
With a more single mind.

Forget me when I die; the violets
Above my rest will blossom just as blue,
Nor miss thy tears; e'en Nature's self forgets;
But while I live be true.

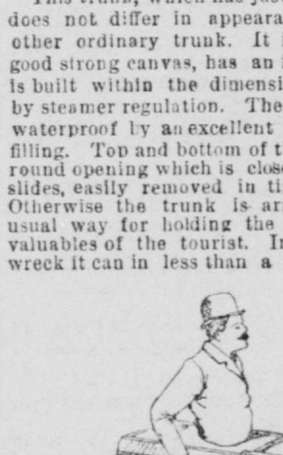
ELIZA AKERS ALLEN.

A UNIVERSAL TRUNK.

Can Be Used for Carrying Luggage or as a Life-Preserver.

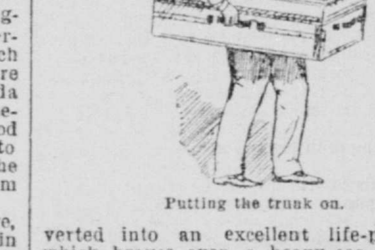
St. Louis Post-Dispatch.

This trunk, which has just been invented, does not differ in appearance from any other ordinary trunk. It is covered with good strong canvas, has an inside tray, and is built within the dimensions prescribed by steamer regulation. The edges are made waterproof by an excellent layer of rubber filling. Top and bottom of the trunk have a round opening which is closed by means of slides, easily removed in time of danger. Otherwise the trunk is arranged in the usual way for holding the wardrobe and valuables of the tourist. In time of shipwreck it can in less than a minute be con-



Putting the trunk on.

verted into an excellent life-preserver, which braves even a heavy sea. In that case the trunk is opened, the inside tray removed and the contents which it is necessary to save squeezed into the side compartments of the trunk. A caoutchouc covering folded around the bottom ring is drawn up and pressed into the slide around the top circle. Thus the trunk becomes perfectly waterproof. The person then steps with both feet into the center hole and draws the trunk up to the hips by means of the outside handles. He is now ready to jump into the



The trunk as a life float.

water to brave its dangers without difficulty. The tests which have been made with this ingenious life-saving apparatus have yielded the most satisfactory results. When leaping even from high surfaces the body does not become entirely submerged by water, the head and shoulders remaining steadily above.

The trunk, when in use as such, carries easily 300 pounds, and when in the act of serving as a life-preserver the two compartments, which are made perfectly waterproof by the caoutchouc mantle, can still hold several changes, and all the valuables the shipwrecked tourist carries with him.

ITEMS OF INTEREST.

A subscription of $32 37 from each inhabitant of the United States would wipe out every national, State and municipal debt in the country.

A calf with a single eye, no ears and five legs is the joy of Wayne County, Iowa. It is now over a month old and bids fair to grow into full cowhood.

One of the largest of Boston's retail dry-goods stores now has a gymnasium on the top floor for the use of the saleswomen and other female employes.

A New York manufacturer of travelers' goods imports a great many elephant hides annually. He uses them for making trunks, which he says are becoming popular.

The longest train ever handled by a single engine in this country has just been hauled on the Redding road. It contained 250 empty cars and was a mile and a quarter in length.

The Women's Temple in Chicago, which cost $600,000, was largely paid for out of the contributions of penny banks, 100,000 of which were opened, it is said, for the purpose.

The total force in the naval service afloat in 1890 was 53,359 officers and men, of whom 30,020 were between the ages of 15 and 24, 17,310 between 25 and 35, 5150 between 35 and 45 and 870 above 45 years of age.

A dentist of Ansonia, Conn., a few days since advertised that he would sell at auction a set of false teeth "now in the mouth of a patient." The dentist made the teeth seven years ago and claims they were never paid for.

An aged parson, who recently visited Caribou, Me., stated that he had written and delivered 1500 sermons, and that it took just 700 of the manuscripts to fill a barrel. Dry measure is what the unappreciative villagers called it.

Jacob Fegley, living along the Perkiomen Creek, near Quakertown, Md., gathered enough feathers to make four good-sized feather beds after a flock of about 500 wild geese had spent the night in a swamp on his place on their way North.

Seventy thousand people kissed the humerus of St. Ann, the saintly relic which had a stay of two weeks in New York, and many miraculous cures were chronicled in the metropolitan dailies. It is said that the cures are not permanent, however.

The felt cloth which is made into hats is composed chiefly of the hair of rabbits, hares or goats, mixed with much wool. These substances are entangled together and pressed and beaten until they adhere to form a compact but flexible material.

The World's Fair Commission from Brazil is at home, actively developing an exhibit from that country, among the leading features of which will be groups of cinchona, coffee trees in bearing, cochineal cacti, mammoth palms, ferns, bamboos, etc., and models of fruit.

It is stated that the height of the human body is generally 10 times the length of the face; the face is as long as the hand; the arm is four times the length of the face; the sole is one-sixth the length of the body, and six times the thickness of the hand equals the thickness of the body.

BAY ANGLING IN JUNE.

Some Plain Talk on Fish by an Old Waltonian.

The Place, the Time and the Opportunity. How to Catch Smelt, Perch and Rockcod.

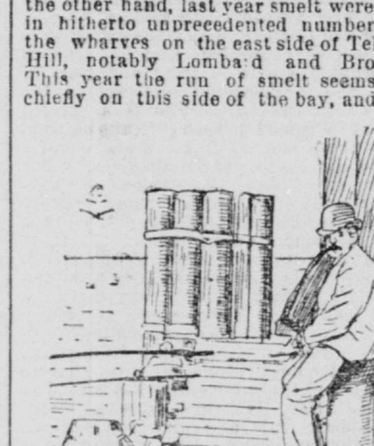
Written for THE MORNING CALL.

June is not only the most pleasant month for bay-angling, but a conjunction of favorable circumstances renders the probability of empty baskets exceedingly small to those well posted in the times, places and means of capturing the dashing smelt, the artful perch and the greedy rockcod.

For the purpose of giving the readers of THE CALL a wrinkle in the matter, a reporter interviewed a number of the most successful and indefatigable bay-anglers and the results of the interviews are here summarized.

It may be stated by way of introduction that as time and tide are of vital import in the affairs of men, they have not less importance in the ways of anglers. It is useless for the tyro to cast his line at the wrong stage of the tide. He will be apt to repeat if he does try the experiment, the good old apostolic doctrine, "We have toiled all night and have caught nothing." Also it may be added that the man who starts out to catch smelt, perch and rockcod at the same time on the same line will get an empty basket for his pains.

The bay is dotted all over with choice spots for bank anglers, and to the boat fishermen the selection is practically unlimited. But it is to be noted that in places where excellent sport has been obtained one year the ensuing season will be productive of nothing but vanity and vexation of spirit. As a good illustration of this may be mentioned the fish-wharf of the McCollum Fishing Company on Kershaw's Island, opposite Sausalito. Two years ago hundreds of pounds of perch and smelt were taken from the wharf. Since then the knowing disciples of Izaak Walton have given the place up as a bad job. On the other hand, last year smelt were caught in hitherto unprecedented numbers from the wharves on the east side of Telegraph Hill, notably Lombard and Broadway. This year the run of smelt seems to be chiefly on this side of the bay, and all the



Angling for Smelt.

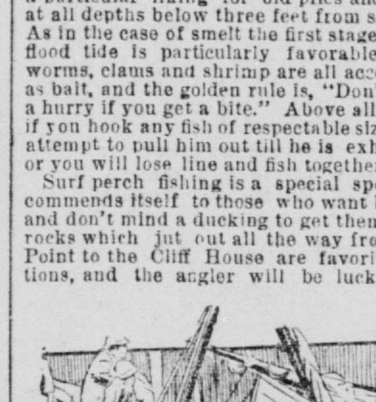
way from the Presidio wharf to Jackson-street pier the angler can scarcely fail to secure a big basket of smelt by fishing with a fine gut leader and a series of fine gut hooks of the smallest size ranged at intervals of one foot down to a sinker at five feet, at the very outset of the flood tide.

This is the secret, and the whole secret of smelt-fishing. A long bamboo pole, from which a short line depends vertically, on that side of the wharf toward which the tide is running, and the hooks baited with portions of pile worms. No float or cork is needed, the tip of the rod will give the proper indication, and the fish will hook themselves. Over haste is as bad as not being quick enough. The smelt come along in countless thousands with what is known as the "rip" of the tide, easily recognized by the long line of froth and foam where the incoming tide meets the obstructing slack water. The first half hour of the flood is worth all the ensuing five hours. Wherever there is an eddy there the chances for smelt-angling are best. Such eddies are to be found on the wharves at Tiburon, Sausalito and the Presidio, and at the freight wharf at Oakland mole. Another point to be noted is that smelt love clear blue water, and, if the bay is muddy and discolored after floods or rain, the angler will save time, money and profanity by staying at home.

The eddy at Lime Point is a noted spot for smelt anglers and the fish run unusually large, but it is a tedious tramp from Sausalito. If pile worms cannot be procured or the supply runs short small portions of the "siphuncle" of a clam or even garden worms will answer the purpose. Shag Rock and what is known as the Smelt Rock opposite Sausalito have good reputations as pitches for smelt anglers and up to three years ago large numbers were caught at the end of Fourth-street long bridge, but the sewage polutions at that point have lately driven the fish away.

There are three kinds of perch commonly met with in the bay, namely the silver or viviparous perch, the porgee and the surf perch. The first two have similar habits and are caught in the same way. They have a particular liking for old piles and swim at all depths below three feet from surface. As in the case of smelt the first stage of the flood tide is particularly favorable. Pile worms, clams and shrimp are all acceptable as bait, and the golden rule is, "Don't be in a hurry if you get a bite." Above all things if you hook any fish of respectable size don't attempt to pull him out till he is exhausted or you will lose line and fish together.

Surf perch fishing is a special sport and commends itself to those who want big fish and don't mind a ducking to get them. The rocks which jut out all the way from Fort Point to the Cliff House are favorite locations, and the angler will be lucky if he



A Big Catch of Rockcod.

escapes being swept clean off by one of the big waves which roll in without the slightest warning. The surf perch feeds on the worms and crustaceans washed out of the sand by the breakers, hence the line must be very strong, the hooks large and the sinker heavy if any success is to be hoped for. There is no refinement or nicety about the job; it is simply a matter of pluck and a quick eye. Pluck, because the perch come rolling in with the biggest waves: a quick eye, because the seizure of the bait is instantaneous, and there is no second chance if a miss is scored. The fish often weigh four or five pounds, and a sack full of them is a smart load for a strong man. One angler, fishing from the rocks below the Cliff House, caught recently 52 fish, averaging a pound and a half apiece, in one afternoon.

The rock-cod, which is not a cod at all, is among the deep-water fishes and takes a bait on or near the bottom. The smaller specimens are taken in thousands daily from the piers and wharves all along the bay, and it is observable that the best fishing is to be had in the early morning before the vibrations of the city front traffic are communicated to the bottom of the water. To get the larger fish it is necessary to take a boat and then a catch is assured. Raccoon Straits, near the Quarantine Station, Point Caballo, Black Point, Mission Rock, Blossom Rock and the shoal 200 yards east of the Presidio wharf are favorite spots. There is a fine piece of fishing ground on the south side of Alcatraz Island, off the promontory on which the bell stands. Outside the heads and especially on the Cordell banks and near the South Farallone the rock-cod fishing is superb. The line should be thick and strong, the hooks fastened on copper wire, and the bait a salt sardine, first, last and all the time. If a boat is objectionable on account of a sensitive stomach very good rock-cod fishing can be had from the wharf at Alcatraz Island (with permission from the officer of the day) or wherever the water is deep and the bottom rocky, with a strong current or eddy.

Oriental Customs in America.

New York Sun.

The Orientals who come to New York keep up the customs of their country to some extent. Two poor Syrians in this city recently paid a visit to an Effendi in his office. As soon as they reached the door they took off their shoes, salaamed, and entered the office in profound humility. There are amusing stories in Washington about the formalities practiced by Hassan Ben Ali and his retinue from Morocco during their recent visit to the White House in Washington. When Hassan approached President Harrison he bent his head, fixed his eyes on the floor and salaamed majestically, while the members of his suite remained prostrate during the whole of the interview.

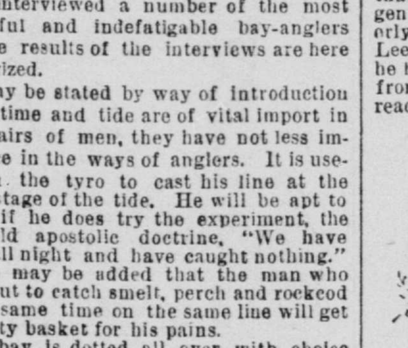
DECAPITATED AT APPOMATTOX.

One of the Very Last Men Who Was Killed During the Civil War.

St. Louis Post-Dispatch.

Visiting the historic field of Appomattox some 20 years ago, the writer was shown over the country by a gentleman living in that town, who had been an eye-witness of many of the scenes of that closing day of the war, as it practically was.

Said he: "I suppose the last shot—at least the last cannon shot—of Lee's army was fired from my front doorstep. There had been some mistake about the flag of truce. It was, as I remember it, an old towel or napkin taken out by some one of a group of officers who were sitting under that apple tree yonder." And here the gentleman pointed to an orchard on the easterly side of the Appomattox Creek. "General Lee and his staff were sitting there, and he had already received the communication from General Grant which caused him to reach the determination to capitulate. There



Appomattox, Where the Surrender Occurred.

was a part of the Federal army coming through those woods yonder, and a little battery of two pieces was brought up and the guns unlimbered and placed ready for action right here, in front of my doorstep. The Federals evidently were not aware that a flag of truce had gone out, and the Confederates were determined to check their advance, for they, too, had received no intimation of cessation of hostilities. The guns were loaded and fired once, and then one of them was loaded more speedily than the other, and, getting good aim, the gunner discharged it at what seemed to be a group of officers. Before the other gun could be fired the flag of truce was seen, and, of course, the engagement ended. I was told afterward that this was the last cannonading of the war."

It was something of a coincidence some years later to hear General Chamberlain narrate an incident which happened under his eye at Appomattox. He was leading his brigade, he said, through the woods, advancing to take position to threaten Lee's army, which was on the crest of a hill on the other side of the Appomattox.

Word had not reached him of the flag of truce. Of a sudden he saw a battery of two guns drawn up in front of a brick house, the object being plainly to check his advance, temporarily, at least. Just as he was preparing to charge upon the battery an aid came to him from General Custer announcing that a flag of truce had been sent out by General Lee and that hostilities would be suspended. While he was receiving this news the Confederates attacked with their battery, but did no damage, not having range. Then, he said, one of the guns was again discharged, and the ball decapitated a young officer of his brigade of whom he was very fond, who had been a brave soldier and had fought almost scatheless for nearly two years. The shock injured no one else, and the firing was immediately stopped, the Confederates having received instructions, and they abandoned their guns and made their way back to General Lee's camp. This officer was undoubtedly the last soldier killed of either side in Virginia, and but for misapprehension he would have been alive.

A MODEL THEATER.

Main Building of the Vienna Musical and Dramatic Exhibition.

New York Herald.

Heinrich Conried, the American commissioner of the big musical and theatrical exhibition now being held in Vienna, sails for Europe this morning on the steamship Columbia. He will be accompanied by Mr. Maurice Steinert of New Haven, whose valuable collection of antique string instruments is now in one of the exhibition buildings. These instruments include harpsi-

Vienna's Main Theatrical Exhibition Building.

chords, spinnets and clavicherds, and have been on exhibition in the Smithsonian Institution in Washington and in other places for some time.

The authorities at Washington only parted with them on condition that Mr. Steinert would reloan them to the institution upon their return for a lengthy period. While in Vienna Mr. Steinert will perform on the instruments compositions in vogue at the times in which they were made. One instrument was the property of Mozart and another was used by Beethoven in composing.

There are nine buildings on the exhibition grounds, the principal one being the Model Theater. It is expected that this building will prove very interesting to the numerous American managers who will visit Vienna during the summer.

It was constructed upon original ideas of Architect Fellner, and has many novel features. It is made entirely of wood, has one very small gallery, and seats 2000 people. It is situated in an immense square, and in case of fire or accident a man on the stage pulls a lever that causes the roof to slide off, and another employe causes the four walls to fall outwardly, leaving the audience in the open air. There are 50 exits to the building, or one for every 40 persons.

Through the Austrian Consul Mr. Conried received yesterday the programme which will be carried out during the exhibition. The Emperor formally opened the display on the 7th inst. It was expected that the company of the Vienna Burg Theater would be the first attraction in the model playhouse, but owing to the illness of Frau Charlotte Wolter the organization was unable to appear. The company of the Deutsches Theater, in Berlin, opened the house instead, and was followed by the company belonging to the Hungarian National Theater.

One of the big attractions of the exhibition will be the engagement of the entire ensemble of the Theatre Francais, which begins to-night. The company will remain for a fortnight and give a number of the plays in its repertoire. On June 1 the Bohemian Opera Company will take charge of the stage and remain until June 7, when it will be succeeded by the organization of the Theatre des Varieties of Paris. The latter part of June will be taken up by the performance of a play called "The Tragedy of Man." The imperial ballet of Vienna will be seen from June 1 to the 14th, and from the 15th to the 24th a picked company from Berlin will produce "Hamlet" and other plays. The succeeding attraction will be the Plattdeutscher Company, with Herr Junkermann.

The imperial ballet from Moscow will appear from August 1 to 5, and on August 6, 7 and 8 the Brixlegger Passion Play will be given by Tyrolean peasants. From August 9 to 15 the ballet from the Scala, Milan, will appear and will be followed by the company from the Bouffes Parisiens. A company from the National Theater in Warsaw will come next and will be followed by the Italian Opera Company from Milan, under the direction of Mascagni. From October 1 to 9 a comic opera cyclus of the works of Strauss, Millocker, Suppe and Penne will be given and bring the exhibition to a close.

All of the theatrical performances will be given in the model theater, while the ballets will be introduced in another building. It is expected that while the ballot performances are being given Mr. Henry Irving and other stars will be induced to appear in the theater.

Is Marriage a Failure?

New York Sun.

Marriage may be a failure in San Francisco, and it may not, but it is interesting to note that comparatively few people are making the experiment. During last year there were only 3236 marriages in the city—less than 11 to the thousand of the city's population. The rate in London is more than 18 per thousand. What it is in the various cities and States of the Union is not recorded accurately.

SHOW THE GENTLEMAN IN.

That Is What the Big Man's Visitor Likes to Hear.

But Very Often He Don't Hear It—The Approachableness of Our Local Great Ones.

Written for THE MORNING CALL.

Big men—that is men who fill lots of space in human affairs—are more approachable nowadays than ever before.

It is only the old-fashioned men who can never be seen.

Still, it depends a good deal upon who you are and what you want—this reaching of big men.

Are our San Francisco great ones approachable?

A lump question like that cannot readily be answered. It will be necessary to take them up man by man, and even then one has not solved the problem to one's complete satisfaction, for, taking every man in his humor one must often go to some pains to find the precise hour of the day, whether it be before or after dinner, at which your particular man is seeable.

Never run away with the idea that because you know a great man, one is going to know you whenever you happen to meet him. A young man trying to make a start in life, who presumes upon his slight acquaintance with some great one to stop him on the street and try to "hold him down" for the coveted interview is a young man of bad judgment, not to say bad taste.

Such a young man would smoke before breakfast.

If you are an average person of average address and your errand is of average importance you can see Mayor Sanderson if you go to his office in the new City Hall between 10 and 12 A. M. He is then as approachable as fly-paper is to flies, but in the afternoon—beware. You may find him congealed. This is because nearly everybody who wants to see the Mayor goes in the afternoon. After 4 o'clock he can generally be found at his Market-street store, which is the worst possible place to select for an interview. But it must not be thought that our Mayor is not an approachable man. He is, in fact, as approachable as a Mayor well can be, and that, too, by all kinds of people.

Chief of Police Crowley is not easy to talk to, and getting at him is not a simple thing. The round man who sits on the top of the stool behind the counter in the Chief's anteroom, and who owns the whole world, fires the big booming question at you, "What d'ye want?" The round man wears brass buttons and his big booming question makes you feel very small. Men have been known to forget that they had any business with the Chief and to apologize very humbly to the round man and go out and buy a smaller suit of clothes. The Chief does not say much in conversation, but what he says is always to the point.

Three doors must be gone through before you can stand in the awful presence of J. S. Leeds, the manager of the Traffic Association. Mr. Leeds is a good man, but he is not approachable. For months after taking his seat in his little office in the Wells-Fargo building, at Market and Sansome streets, no reporter set foot within its sacred precincts. Newspaper men could get as far as the counter near the outside door, and send in their cards, but that was the end of it. One day three reporters met in front of the counter, wrote their names all on one card, gave it to an unsophisticated clerk and told him to tell Mr. Leeds that a committee from the San Jose Grange wished to speak with him on important business. After considerable delay the three reporters were let in behind the oak-grained door, and there they actually saw and conversed with Mr. Leeds. Being in and seated they could not well be kicked out, and they had the desired interview. Since that time Mr. Leeds has been somewhat more approachable. All the newspaper men like him, but they say he is the hardest man in town to reach.

Another very tall persimmon is J. L. Flood. Mr. Flood is affable and courteous enough when you get inside his private office; the only trouble is that you don't get inside. You are always held up by Secretary Walsh, who wants to know what you want to see Mr. Flood for and all about it. One hundred to one you go away without seeing Mr. Flood. Supervisor Burling had an odd experience with Mr. Flood once upon a time. Burling was in the brokerage business. Flood wanted to see him "very particularly," and sent a note to him to come around next day. Burling expected to go right in when he reached the outer office and was astonished when Secretary Walsh said: "Mr. Flood is not seeing anybody to-day, sir."

"Well, can't I send in my card?"

"No, I'll tend to the business. What is it?"

"Never you mind. My business is with Mr. Flood."

"Well, he can't be seen."

"Very well. It's of more importance to him than it is to me. You can tell him that when he wants to see me, he knows my address. I shan't come around here again if he sends for me a dozen times."

James G. Fair is a very approachable man, and is always courteous to those seeking an interview, whether it be on business or anything else. While he is always ready with his beaming smile when a reporter goes to see him, he is by no means easily pumped. Mr. Fair has a good many visitors in the course of a day, but if he is in he generally manages to see them all. Sometimes a clerk asks a new comer what his business is, but as a rule the visitor goes unchallenged.

Irving M. Scott is a hard man to see and a hard man to talk with, if you are not on the kind of business in which he is interested.

Henry T. Scott is decidedly unapproachable.

John Rosenfeld is easy to see and easy to talk with.

It is like bearding the lion in his den to pass through the portals of the private office of Lloyd Tevis. While you are talking with him and another visitor's card is handed in, it is always, "Tell him I'll see him in half a minute." Which is an invitation for you to depart. The next man gets the same sort of an invitation.

William Alvord is not so carefully screened off from the public gaze as are some other bank presidents, but he interposes an icy barrier between himself and unwelcome visitors.

J. B. Stetson, president of the California-street Railway system, is an affable man, who is not hard to see.

William L. Merry is also on the list of the approachable.

M. M. Estee always says, "show the gentleman in."

George W. McNear is ready to see anybody who comes on a reasonable errand.

General Ruger, who commands the Department of California, sits in state in his big office upstairs in the peak of the Phelan building. To get into that office you must first be challenged by an orderly in a sort of a "who-goes-there?" style, and if it be your good fortune to be ushered into the awful presence, you will be two inches shorter by the time you get ready to leave, or rather, when the General gets ready to have you leave.

President R. J. Tobin of the Police Commissioners is easy to see, and not abrupt in conversation.

Fred Sharon pays little attention to a card sent in to him unless he takes particular interest in the sender. The average man finds it hard to see him or talk with him.

James Phelan greets visitors pleasantly, and it is no hard matter to reach him.

James V. Coleman can readily be met and interviewed.

Timothy Hopkins' visitors have no reason to complain of a lack of courtesy. If there is no one "holding down" the young capitalist in his office the seeker for an interview can easily find him.

J. W. Mackay is not an approachable man. When he is in town he has so many visitors that he has to run away from many of them.

No one ever complains of E. B. Pond's lack of "approachability."

Charles Webb Howard will see you if he is not too busy. He is generally too busy.

Adolph Sutro sets up no insurmountable barriers between himself and his visitors, but he is a hard man to find in the afternoon.

The best way to get to see a big business man is to send in word what you want to see him about. If he has any interest in the subject he will generally see you, and if he doesn't know anything about the subject write the matter down on your card in a way that will appeal to his interest. Even big men have been known to have curiosity. But there is no rule that will apply to book agents.

Whatever else you may do, don't go early or late to a man's residence to see him on a matter of business. The servant at the door will repay you for your trouble by telling you what his master's office hours are. That will be about all you will get in return for your streetcar fare and the climbing of the front steps.

In Australia the aboriginals are used most successfully in tracing game and other objects in pursuit. With their eyes fixed upon the grass, sometimes even kneeling to scrutinize the ground more closely, examining a torn leaf or a broken twig, they can tell how long since the game passed and whether it was alarmed or unsuspicious.

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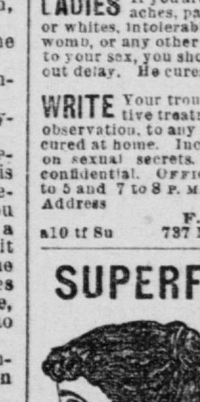

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