

THE GREAT DESERTS OF ARIZONA AND CALIFORNIA TO BLOSSOM LIKE A ROSE.

THE Department of Agriculture in the United States has been endeavoring to remove from the European States the reproach that constructive forestry, as the European powers understand it, is neither understood nor attempted here. The English in India have done wonders in reclaiming supposed desert land, and the Department of Agriculture is going to start in along the same lines by making trees grow in the sandy places of Arizona.

To a certain extent the undertaking can hardly be called an experiment. The Mormons demonstrated many years ago that date palms would grow where other trees languished and died, but the Mormons had no means of securing good palms, and in consequence, while the trees they planted undoubtedly grew, they obstinately refused to bear fruit. That, however, was due to a mistake that is not likely to be repeated. It seems that some unregenerate person sold the Mormons male trees, and a male palm will no more bear dates than a rooster will lay eggs.

No trick of this kind will be worked upon the Department of Agriculture, for it has just sent one of its best specialists,

Dr. Walter T. Zwingie, to Morocco with plenty of money to buy good date palm cuttings, and an abundance of cautions to look out for vegetable gold bricks in the shape of male palms.

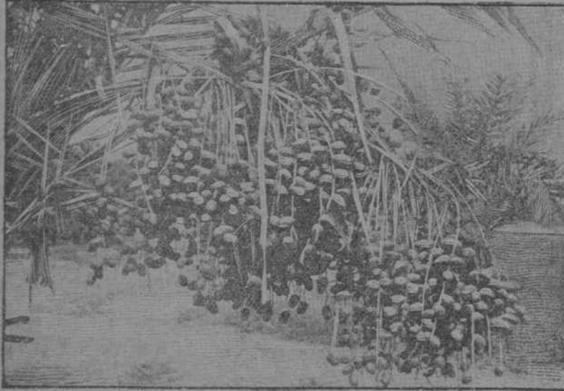
The barren lands of Arizona and Southern California have long been an affliction to the Department of Agriculture. The deserts of Southern California have raised some uncommonly fine cattle, but the Arizona variety has been chiefly notable for its output of gila monsters and "bad" Indians of the Geronimo stripe. It has been demonstrated that driven wells will furnish an abundance of water in even the most hopeless looking spots.

There seems to be a singular aptness in the variety of palm which the Department of Agriculture has selected for Arizona, for the capital of the State is Phoenix, and the scientific name of the date palm is "Phoenix dactylifera." The date palm is not a particularly swift tree as far as growing is concerned, but it will bear fruit in four years, and will grow from 8 to 100 feet high. Other varieties of fan palms will be planted also.

A grove of young date palm trees is an



HOW THE BEAUTIFUL DATE AND FAN PALMS GROW IN THEIR NATIVE LAND IN MOROCCO.



HOW THE DATE PALM GROWS ITS CLUSTERS OF FRUIT.

impassable jungle, from the closeness and rigidity of the leaves. The flower spathes, which start direct from the leaf, are singularly beautiful and profuse, more than 11,000 blossoms having been counted on a single leaf. Rather careful cultivation of the date palm is necessary in order to secure good results, for the tree belongs to a class which botanists call "dioecious"—that is to say, the tree is always an individual. Male and female flowers do not grow on the same tree. Because of this it is usual to cut off the blossoms of the male trees when the pollen is ripe and shake it over the blossoms of the female tree. In lands where insect life is abundant this procedure can be omitted.

The fruit varies much in size and quality, and in the oases of the Sahara forty-six varieties are recognized. In Egypt the date is an important article of revenue, for the Government imposes a tax upon each tree, and more than 2,500,000 are registered. A single tree is expected, there, to bear from 120 to 430 pounds of fruit in a season.

A date palm begins bearing fruit at from

five to eight years of age, and it frequently lives to be 200 years old. At Massaba, in Palestine, there is a date palm in a convent court yard said to have been planted by St. Sada in the year 400 A. D.

Altogether aside from the hope that the cultivation of dates in Arizona will be profitable, is the expectation that the growth of the trees, and the consequent irrigation, will stimulate other plant life. Once an undergrowth is fairly started, as found that sandy desert soon becomes rich woodland. Some date palms are now growing in Arizona.

There are dozens of uses to which a date palm can be put besides the bearing of fruit. In countries where the temperature does not allow the fruit to ripen, the palm is planted both for ornament and for its leaves, as in Northern Italy, where the leaves are sold to Catholics for Palm Sunday, and to the Hebrews for the Feast of Tabernacles. As the date palm gives palm branches which were strewn in the path of the Saviour on his entry to Jerusalem.

When the heart of the leaves is cut, thick, honey-like juice exudes, which, after fermentation, becomes wine or vinegar.



A LITTLE DATE PALM ACTUALLY GROWING IN ARIZONA.

A CHRISTIAN CHURCH OF THE THIRD CENTURY.

A CHAPEL founded in the third Christian century, and long forgotten or neglected, has just been restored and reopened for Christian worship. The building stands on the Appian Way, that famous Roman thoroughfare, and had been abandoned for centuries, partly demolished and even used as a wine cellar. The noted explorer of the Catacombs, De Rossi, found this rude edifice and recognized in it the ancient oratory of St. Sixtus and St. Cecilia. He transformed it into a museum for the inscriptions found in the neighboring Catacombs, but only within the last few months has it been carefully restored to its original form and uses, much to the satisfaction of the Christian world.

The bust of De Rossi has been placed in it, and at the modest altar plants pilgrims pray for the souls of the martyrs St. Cecilia and Pope Sixtus. The latter was surprised in the year-by Catacombs during the violent persecutions of Valerian and the emperor Diocletian (258) here. Around this chapel lies the first cemetery of the Popes, and Cardinal of Christ.

Fanchon Thompson, an American, Captivates Paris in Carmen.

MISS FANCHON THOMPSON is a Chicago girl who has captivated the Parisian people by her singing and her beauty.

She made her debut in the role of Carmen, at the Opera Comique, in Paris, and achieved a great success. She is rapidly achieving as great a popularity among the Parisians as Sibel Sanderson, that other American singer who has been more honored abroad than at home.

Miss Thompson's beauty fits her peculiarly for the part of Carmen. She is capable of enacting the passionate Spaniard to the finger tips. She has a fine and very generally developed figure. Her lips are full and red, her features are clear-cut and vivacious. Her hair is extremely beautiful and abundant and is jet black.

Miss Thompson is the daughter of a comparatively poor man, and has shown great perseverance in her upward struggle. She was aided by a wealthy Chicago family named Adams. She studied in Paris.

At one time she was engaged for this season's American grand opera troupe, but in view of the small part assigned to her she decided to remain in Paris. In this way, however, she forfeited an opportunity to appear in Chicago, and the people of that city showed some indignation. They went so far as to charge that Miss Thompson preferred Paris to Chicago.

Doubtless when she has established her reputation and perfected her art in Paris she will feel better qualified to appear before the highly critical audiences of Chicago.

SNAKE BITE CURED BY SERUM OF MUSHROOMS.

PARIS, April 20.—I have just made an interesting call upon Professor Phisalix, whose preparation from the juice of mushrooms has overcome the poisonous and deadly effects of snake bites. His interesting experiments on rats, rabbits and even man have stirred up a widespread interest in scientific circles. If his serum of mushrooms really turns out to be a further experimentation to make men snake bite proof, he will go down in history. But as the distinguished professor grimly says, "It is not easy to find human subjects to prove my case."

"I have made many experiments with the new mushroom serum, all of which have been successful. Probably the reason why I have followed up these experiments so closely is because I fully realize the wide importance of popular knowledge of the curing of snake bites, particularly in those

countries where snakes are numerous. I gained by applying the remedy directly to the nervous system.

"The bite of a viper does not act rapidly, for a viper is one of the weakest of snakes. Snake poison produces a species of intoxication. Fungi may have a similar effect. Each may act upon the central nervous system. The intoxication caused by the mushroom serum counteracts that caused by the snake bite. The poison of the snake acts through the nervous system upon the heart, affects its action, interferes with respiration and brings about collapse. The mushroom serum does the same. Apply the latter in time and it nullifies the effects of the former.

"I have made experiments upon various animals and once I have tried the results of the mushroom juice upon a man.

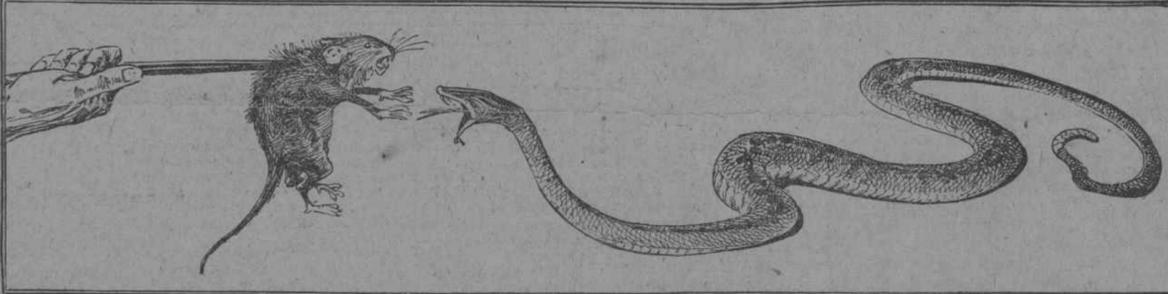
"The first experiment was upon a guinea pig which had been badly bitten by a

pose of showing that a serum has been discovered which cures the poisonous bite.

"But one of our employees happened to have been bitten by a snake a few weeks ago. Here was a scientific opportunity. The man showed unmistakable symptoms of advanced intoxication. The poison was rapidly doing its deadly work. There was no doubt that he would soon be a corpse. I injected a strong dose of the mushroom serum. Gradually the drunken symptoms left him and he was cured.

"How can I prevent myself from being poisoned by a snake bite? Simply by a species of vaccination. I have discovered the serum.

"I am devoting all the time I can to this, for I believe it is of the highest interest to humanity. The professors of the Pasteur Institute at Lille are giving me the most valuable assistance. I have already made ex-



PROFESSOR PHISALIX, OF PARIS, PREPARING A RAT FOR A TEST OF HIS MUSHROOM SERUM FOR SNAKE BITE.

periments upon dogs with this new species of vaccination. I have found that, for at least one month after vaccination, dogs cannot be poisoned by snake bites. It seems that the effects of the vaccination grow weaker as time rolls on. But it is clear that we have discovered the principle of prevention, and at least a limited application of the same. Science has not yet said its last word upon this subject. The solution of the problem of prevention may merely for a month or so, but for a life time, is within sight, and I hope to be able to give it to the world shortly.

SHOULD MARRIED WOMEN FOLLOW PROFESSIONAL CAREERS?

By Sarah Grand, Author of "The Heavenly Twins."

IN dealing conscientiously with social subjects one finds that it is unsatisfactory to generalize and difficult to discriminate. The difference between a right and a wrong conclusion is sometimes so trifling that it may easily be overlooked even by a careful expert, yet the consequence of making mistakes in these matters may mean the wrecking of many lives—which places a heavy responsibility on all who venture to express positive opinions. I would have no dogmatism. What is good for to-day may be bad for to-morrow. I would arrive at the truth.

You may say that I am taking myself too seriously. In serious matters people cannot take themselves too seriously. The simplest expression is open to misinterpretation; the most idle speculation is capable of influencing Shelley said, "Alas! we know not what we do when we speak words!" Thought creates thought, opinion forms opinion, and suggestion is the active agent always at work to move our impulses.

I always feel that this particular question of married women and professions is one to be agonized over. "It all depends," is the answer, so far as I am able to judge of it. It is essentially a matter of circumstances altering cases. Personally I have no doubt as to what is the ideal life for the average married woman. She can have nothing better than a good husband and ample leisure for her household duties. When she is so happy as to have children, they must be her primary consideration.

The influences brought to bear upon a child in the first few years of its life are so important that no woman worthy of her sex would leave it to the care of others except under pressure of cruel necessity. There are unfortunately some abnormal women who have, as it were, no aptitude for motherhood, and the best thing that can happen to their children is to be brought up by better hearts, but such women are the exception.

There are people who have been perverted themselves, for the most part, by ungenial homes. Among them are many who recognize the defect of their nature, and do their best to remedy it by securing women more generously endowed to bring up their children; in this way they do their duty to the best of their ability, and, having done it, feel themselves at liberty to follow special pursuits.

As wives and mothers I should count these women failures, and should say that they are quite entitled to try something else. Let them take up law, literature, medicine or art if they like. Any honorable profession should be open to them. But if they are affluent and no necessity constrains them to make money, any attempt to do so should be discontinued for the sake of those who must work to live.

It is argued, I know, that a woman may make her household excellent and follow a profession as well. Many women do. But it seems to me that the question is not so much what women can do when they are driven to it, but what they ought in fairness to be asked to do. If you take marriage from the lowest standpoint, that of a profession in itself, you will find yourself forced to consider the strain of following two professions at the same time. No man is ever expected to do so. This is one of the great causes of complaint that women have had, that if they do anything they are expected to do everything. Numbers have attempted the task—borne the children, brought them up, administered the household and made the money—each and every duty was punctually performed; but how many such women, and of these how many that were not utter wrecks, have survived to old age. I tried for many years to combine housekeeping and literary pursuits, and managed both, but at infinite cost. My health, household and literary work all suffered, and it was not until circumstances put it in my power to give myself entirely to literature that I succeeded. Versatile people are usually an actor in everything. There are, of course, extraordinary exceptions, but then one cannot reason from the exceptions.

The question of professions for married women is usually a question of means, al-

though, when money is sorely wanted there can be no real question in the matter—the one of the family who can make it must make it. And therefore when one is asked, should married women follow professions? one is forced to allow that it depends, and fail to add, not if they can help it. But if it be the woman who must work, let her have her chance as the men would have—let her go to her work unhampered by other cares.

The fairest division of labor in the social system is for the husband to make the money and the wife to make the home; if she does that well she will have enough to do. And this arrangement need not entail the suppression of any great gift. In bygone days women of extraordinary talent were condemned, for no crime but their sex, to do plain needlework, which might just as well have been done for them by women of no talent at all; that was a waste of good material for which there can rarely be any necessity. "Home is the woman's sphere" used to mean that life began and ended there, in a round of amateur performances and the suppression of all that was individual in everybody.

In France, where it is the rule for married women to work, the children undoubtedly suffer—suffer grievously. I have studied the subject on the spot, and been forced to the conclusion that when there are children they should be the first consideration, and the parents are both bound to sacrifice themselves for their good. Exactly what will be for the good of the children will often be a very nice question, and it is especially one of those upon which it is impossible to lay down any hard and fast rules. But being conscientious and unselfish will be found a great help when it becomes necessary to arrive at a decision in the matter.

A woman should have the same chance in the professions as a man. But a woman's work about the house is never ending; the care of a child is the sweetest of professions, and that woman is neglectful of her best interests who goes out into the world to work when she can get a nice man to do the work for her.

A MAN WHO WAS PATCHED UP WITH HIS OWN FLESH.

ONE of the most successful operations for the repair of injured flesh that has ever been attempted has just been successfully accomplished at the Polyclinic Hospital in Philadelphia.

It was no more skin-grafting experiment, for this one—it meant the actual transplantation of flesh as well as skin. Skin grafting over large areas has long been successful, but it has hitherto been considered almost impossible to repair the ravages made by disease, or less frequently, by the surgeon's knife.

The patient operated upon, one Curtis Shirley, was suffering from elephantiasis, a disease which produces great distortion, causing the skin of the person af-

flicted to hang in folds like an elephant's hide. In Shirley's case the growth covered his face from the forehead to the chin, completely shutting out the sight of the left eye.

After this growth had been removed by the knife the surgeons were startled to see the amount of flesh which had been removed from the face. Dr. John B. Roberts, chief of the hospital staff, at once decided that the only way to repair the damage was to let the sufferer furnish the material. Accordingly, a large flap of skin and flesh was dissected up from the man's neck and this was twisted around until it covered one-half of the wound. For the upper half a similar flap was turned back from the right arm and then the arm was raised to the head and fixed in that position.

After a while the healing had proceeded so far that it was possible to cut the man's arm loose.

Curtis Shirley is now well. He is somewhat patched, but the work was so carefully done that only one scar can be detected.

"Napoleon the Great" Is a Five Thousand Dollar Cat.

PEOPLE who admire cats say that they are the only domesticated animals which possess either character or individuality, but even the most enthusiastic cat lover would probably hesitate before valuing a cat at \$5,000. Mrs. Charles Weed, of Bound Brook, N. J., has a cat, however, which cat connoisseurs say is worth that sum.

The name of this cat is Napoleon the Great, and he is great. He's a big, gray fellow with a coat as thick as a bearskin, but considerably softer. Napoleon belongs to that brand of cat known as Angoras. The breed is distinguished for the length and silkiness of the fur, but also for the beautifully symmetrical markings which some of them possess.

Napoleon is what a woman would call a "solid-colored" cat. He is the same color all over, and is devoid of any blushing variations. Curiously enough cat fanciers say it is harder to obtain an animal all one color than one that is marked. Some of the most beautiful Angoras that ever went on the show bench were pure white,

with the exception of an evenly marked saddle of tiger-yellow stripes. They were handsome, but they were not considered half as good or valuable from a show standpoint as the sombre Napoleon, who in color resembles a battle ship with war paint on.

Keeping a cat of the value of "Napoleon the Great" is no joke, for the animal, fortunately, seems to have no sense of proportion of his value. He is just likely to wander off along the back yard as any other cat of no intrinsic value. The owner of "Napoleon" does the same, and, so far, has managed to vent her high-priced pet from either deriding or eating things which are likely to agree with the internal organs of a \$5,000 cat. The trouble about a cat is that it cannot be compelled to do anything it doesn't want to do.

"Napoleon" has taken first prize at every show in which he has been entered, and is still quite a young cat, and his owners think the animal has many years of prize winning yet to come.



"NAPOLEON THE GREAT," A PRINCE IN THE KINGDOM OF CAT.



HE NEW AMERICAN BEAUTY.