

BY THE PEOPLE

ADVOCATES A NEW BIBLE.

By Professor Smith of Cornell.

The Bible of the future will have a very important place in our religious life, but it will not be the Bible of the present. It will be much larger and will contain all of the books that were venerated by the synagogue and early Christian church, many of which have been eliminated. The future Bible will also be newly translated. Some of the present translations are atrocious. There must also be introductory notes and commentaries.

The most important change will be the entirely new viewpoint in which it will be regarded and a changed estimate of its value, religious and historic. The idea that the Bible is the sole source of religious knowledge and the standard of faith will fade away. It is preposterous to draw a single doctrine from the writings of a hundred different men who had different religious viewpoints. We want all the books of the Hebrews and Christians, and all of the good in the other religions must be incorporated in it.

MINISTERS AND THEIR USEFULNESS.

By Dr. Charles W. Elliott.

Does the ministry nowadays afford a reasonable expectation of a serviceable life, freedom, and growth? First, let us look at the serviceableness of the ministry.

I dare say most young men who are going into the ministry think of city churches with cultivated audiences. A life there is a serviceable life. It is difficult to exaggerate the influence of a competent preacher. It is an enormous opportunity the preacher has in addressing large congregations of intelligent persons each week.

Then there is another kind of ministry which I sometimes think is more attractive than the ministry in the city, and that is the ministry in the country, where the opportunities for intellectual betterment are immense. Country ministers are frequently the intellectual leaders of their flocks. This is the function which awaits our young men, particularly where the towns are deserted by the young people for the cities.

There is another service of the ministry which is frequently noted in American communities. The ethical

improvements are the real elements of all civic and social improvements. The ethical benefit is the real fundamental benefit and improvement. It is the minister who deals with all these ethical improvements and teaches the community that faith, love and hope are the essentials. The promotion of peace and the promotion of good will are the great things, and these are the services of the ministry.

The ministry ripens a man; it softens him. It makes him more sympathetic and more loving. It is not that a worthy ambition for any one looking forward to a long intellectual life? It is not strenuous, but it is faith and love and helpfulness, and these are the great ethical foundations of life in the community.

ABUSE OF THE MONROE DOCTRINE

By Richard Olney.

Within a comparatively short time strange doctrines have been officially and unofficially announced and given prestige and currency by being described as the Monroe doctrine or as necessary corollaries to it. Under these new doctrines it is intimated that if an American State does not behave itself well in either its external or internal relations—good behavior according to our own standards, of course—it may be forced by the United States and coerced into doing the right thing, but if necessary may have its revenue sequestered and applied by the United States according to the latter's notions of justice and equity.

It is too plain for discussion that the Monroe doctrine cannot be invoked in support of any such pretensions; that they are seriously objectionable as calculated to wound the pride and excite the enmity of all other American States and as committing the United States to undertakings of the most vexatious, burdensome and dangerous character.

Our institutions will surely live and our people continue to prosper without the United States converting itself into an international policeman for the American continents or into a debt collecting agency for the benefit of foreign creditor States and their citizens. That the new doctrines, particularly if urged by officials in high places, must have unfortunate tendencies is clear. They are calculated to put the United States in the odious position of a possessor of enormous power who is eagerly looking for opportunity to exert it.

His attentions to the blushing Sarah Ann were regarded with favor, and soon they were engaged. Not long afterward they were married, both being satisfied to dispense with the usual ceremonious delay. A neat cottage was rented near the blacksmith shop—so near that the bride could listen all day long to the music of her lord's hammer. After his marriage it was impossible for Hiram to save money. And when Bart Graves appeared at the shop door the day before Christmas, to remind him that the mortgage would fall due on the morrow it seemed that a thunderbolt had been hurled at him from the clear sky above.

"What! Can't you pay it?" demanded Graves, gruffly. "You ought to be ready, goodness knows, as it's the season for a good trade. Well, I'll have to do the next best thing."

"Close the mortgage," "Can't you give me another six months?" implored Hiram. "Nary a day. Remember, young man, you're dealing with Old Bart Graves, and there's no huckling down. Is this all you've brought?"

"No; there's the stuff at the house? There's my new togetery, and the wedding expenses, and—and Sarah Ann." "Why?" ejaculated Graves, aghast. "I've meant to say I'll have to take your wedding duds and—and your wife, too!"

"How does the mortgage read?" "That's so," admitted Bart Graves. "Let's go to the house," said Hiram.

"I'll have to tell her—there's no getting out of it." Mrs. Patton laughed till exhausted when told of her husband's predicament, but blushed, nevertheless, to know that his queer business transaction involved her own freedom. She saw a way out, however, and forthwith advised her liege to comply with the letter of the mortgage.

"What! And give you over to him?" "Certain!" At which both men began to fear that a trip to the insane asylum would be next in order. "That will free you from this obligation, you see, and I'll immediately pledge myself to pay Mr. Graves the cash balance on the present encumbrance, you making

THE LAST DAY OF SCHOOL.

It gives the world a dreary look And robs life of its cheer To close the battered lesson book And leave our teacher dear. But best of friends must some time part, And so I'll say to you That such a sadness fills my heart I don't know what to do.

PLAY TIME OF THE TORNADO IN THE MISSISSIPPI VALLEY.

The territory included in the States of Missouri, Kansas, Iowa and Nebraska, the center of maximum frequency being near the point of union of these four States, or about a hundred miles east of the geographical center of the United States is the tornado area. According to the reports of the United States weather bureau, tornadoes occur more frequently in May, April, June and July, in the order named, the most violent ones thus far recorded having happened in April and the greatest number in May. Tornadoes have occurred this season in this territory, accompanied by much damage to property and loss of life.

A tornado is the concentration of storm energy. It is the most destructive and the most sudden in appearance of all forms of atmospheric disturbance, and is least easily recognized in its early stages, even by the expert. A tornado and an electric storm arise from the same general conditions, and in the beginning cannot be distinguished one from the other. They often are identical up to a certain point, after which the conditions with which the general cyclone storm comes in contact in its passage from one point to another.

Edward H. Bowle, chief of the St. Louis weather bureau, has made a special study of the subject of tornadoes and is in a position to speak with authority regarding them. "I think," said he, "it would be well to bring out one point in the beginning of this subject, and that is the difference between tornadoes and cyclones. The sort of whirlwind that is popularly called a cyclone is not a cyclone at all, but is a tornado. The tornado is the storm that makes its appearance in the form of a funnel-shaped cloud, while the cyclone is a general storm, or an area of low barometric pressure. The word cyclone means a revolving wind. It is, in fact, a cyclone is a revolving wind, and the cyclone covers a much greater area than the so-called 'twisters,' or tornadoes. A cyclone may be a thousand miles in diameter, while a tornado may be more than a hundred feet.

The cyclone is the parent of the tornado. It is the general condition that produces the tornado. There is always a cyclone somewhere in the United States. Without it this country would dry up, for the cyclones bring us our rains. If you examine a weather map you will see certain sections marked 'low.' These are the areas of low pressure, the storm centers or cyclones, and if you draw a line further you will find that all the little rows which show the direction of the winds in the different localities around this 'low' region point in a direction generally pointing toward the center of the low pressure. This is the way a cyclone moves across the country from right to left, or opposite to the face of a clock. That means that the equilibrium of the atmosphere is disturbed, but not violently, and that the motion is in a generally rotary direction, but horizontal rather than vertical. These storm centers move across the country from day to day, in a general northerly or easterly direction, and the atmospheric conditions which they encounter en route are the immediate causes of violent storms of one kind or another.

It was at first proposed that each of the two strips be divided in half and a section of each be given to the two heirs. But the mothers could not agree upon the division and it was finally arranged that one son should take the rich land, while the other should take the sterile piece.

The valley strip yielded bountiful harvests season after season and the rocky one gave nothing until one day the boy owner happened to notice a tiny white, sweet-scented flower blooming among the rocks and after a careful study and examination it was found to be the only one of its kind in China. The flower grew from a bulb and the boy discovered that these bulbs could be transplanted to similar rock soil without destroying their growth.

Soon the bulbs were in great demand and when it was learned that the flowers brought good luck to the owner of the plant the boy had all he could do to supply the market. From the sale of the bulbs he grew enormously wealthy, while his brother never made more than a good living out of his valuable valley property.

"When I awoke from the operation I felt as if I was burning up." "I see. You must have thought that it had been unsuccessful."—Smart Set.

THE CHAMOIS.

Exciting to the eye, the more exciting because of the hardships connected with it, is offered by chamois hunting in the mountains of Europe. The chamois are found everywhere in the highest mountains of Germany, Austria, Switzerland, in Transylvania, in the Carpathians, also in the Alps, and these extremely shy animals are regarded by all true huntsmen as the most desirable of all game. The chamois belongs to the antelope species; but, unlike its kin of the broad plains, it pre-



HIGH JUMPS AT VASSAR.

Girl Athlete Makes New Record in Vaulting and Putting the Shot. Mildred Vilas, '07, of Cleveland, O., and Inez Millholland, '06, two of the most popular students, established new athletic records at Vassar Saturday, says the New York World. Miss Vilas made a fence vault of 4 feet 10 1/2 inches. The previous record was 4 feet 10 inches, made by D. E. Merrill, '02, in 1901.

Miss Millholland, a beautiful English girl, who is taking a course at Vassar in preparation for woman's suffrage work in England, and who is regarded as one of the strongest women ever at the college, put the eight-pound shot 31 feet 8 1/4 inches, breaking the record of 31 feet 1 1/2 inches, made by E. H. White in 1901.

The surprise of the day was the poor showing of the two present students who hold championships, Alice H. Belding, '07, holder of two records, 7 feet 6 inches in standing broad jump and 105 feet 3 inches in baseball throwing, and Martha Gardner, '07, holder of 100-yard hurdle record, 16 1/2 seconds, and running broad jump, 14 feet 6 1/2 inches. Neither champion was able to equal her record, while in the hurdle race and baseball throwing they were surpassed by sophomore and freshman.

GOOD MEDICINES.

Vastly Important Drugs Should Be Treasured. "No; because any man, however ignorant, with any motive, however ignoble, may manufacture and sell any of the 50,000 compounds known to organic chemistry, and may allege for them what curative powers he will, and because, too, this unlimited opportunity for fraud among the older drugs, it becomes a matter of no small importance to learn that at the present time among the great number of firms manufacturing medicinal agencies there is the greatest conceivable diversity in science, sincerity and wisdom.

"These drugs come from the darkest parts of the earth—from the dark forests of Brazil, from the frozen Siberian steppes, from the banks of the gray-green, greasy Limpopo river, all set about with fever trees, or from 'sliken Samarkand'—but almost everywhere they are gathered by barbarous peoples, the lowest of earth's denizens. It is small wonder, then, that with any one plant there should be a variation among its individual specimens in the proportion of the active medicinal agent it contains. But when we add to this the fact that, in general terms, the per cent of the active ingredient depends on the amount of sunshine it enjoys, on the time of the year, on the amount of moisture, the elevation, the character of the soil, and a dozen other factors, it becomes almost a necessity of thought that the amount of 'medicines' in that plant must vary from a maximum to nothing at all.

"A man's wife goes bravely down to the gates of death to pass through, or, it mayhap, to come slowly back, bearing radiantly with her the flaming torch of another life. Ergot is required. Now, ergot is a fungus growing upon rye, where it destroys and displaces the ovary of the plant. It comes from Russia, Austria, Sweden, Spain and where not; its chemical analysis does not seem to yield reliable information. Its active constituents are not definitely understood. Finally, the physiological activity of the drug may be good, or little, or zero, just as it may chance, while after the lapse of a year it becomes unfit for use. Yet it is to this substance, so utterly variable, that the physicians must trust the life of the woman and the child."—Robert Kennedy Duncan in Harper's.

OUR GLOBE'S CAPACITY.

The Time When the Earth Will Be Fully Peopled. Professor Ravenstein of the Royal Geographical Society estimates that the fertile lands of the globe amount to 28,000,000 square miles, the steppes to 14,000,000 and the deserts to 1,000,000.

Fixing 207 persons to the square mile for fertile lands, ten for steppes and one for deserts as the greatest population that the earth could properly nourish, the professor arrives at the conclusion that when the number of inhabitants reaches about 6,000,000,000 the earth will be peopled to its full capacity. At present it contains somewhat more than one-quarter of that number.

If the rate of increase shown by the latest census statistics should be uniformly maintained, Professor Ravenstein shows that the globe would be fully peopled about the year 2072.—New York Tribune.

THE CHAMOIS.

Exciting to the eye, the more exciting because of the hardships connected with it, is offered by chamois hunting in the mountains of Europe. The chamois are found everywhere in the highest mountains of Germany, Austria, Switzerland, in Transylvania, in the Carpathians, also in the Alps, and these extremely shy animals are regarded by all true huntsmen as the most desirable of all game. The chamois belongs to the antelope species; but, unlike its kin of the broad plains, it pre-

A POPULAR EVANGELIST.

Wife—Karl, when I go to the Riviera I will dream of you every night. Husband—I would rather you stayed here and dreamed of the Riviera.—Meggendorfer Blätter.

A neat and particular housekeeper is not always the great joy to the slothful people who make most of her work, that she imagines she is.

ACRIM GARDEN

Just before the buds open the trees should be thoroughly sprayed. The writer has for a number of years used London purple without injurious effects to the foliage, a dessert spoonful to ten gallons of water. Some of the other arsenites are said to be less injurious to the leaves, and are especially recommended for the peach, as arsenate of lead, the best, used in proportion of two pounds to 50 gallons of water or Paris green, one pound to 150 or 200 gallons of water.

By spraying just before the buds open and just after the blossoms fall there is no danger of poisoning bees and experience shows it to be best also for the fruit. The second spraying should be followed by a third two weeks later.

Small trees may be protected by daily spraying and gathering the bees as they fall into sheets prepared for the purpose, but with large trees this method is scarcely practicable.

Lime-Sulphur-Salt Wash.

The experts of the Department of Agriculture have been conducting some experiments with the lime-sulphur-salt wash and its substitutes for spraying trees for the destruction of insect pests, and as a result two new formulas are proposed which are believed to be improvements on those formerly used. It is to omit salt and use caustic soda in place of lime. The composition is as follows: Water, 50 gallons; powdered sulphur, 10 pounds; caustic soda, 10 pounds. Make a paste of the sulphur with not more than 5 1/2 gallons of boiling water; at once add all the caustic soda, which has previously been dissolved in water. The material is then stirred in a large tub or barrel, and the mixture is allowed to settle. The lime, made into a paste, is added just before the remainder of the water.

The average annual grain crop of the world is estimated at 9,000,000,000 bushels, and it is doubtful whether a twentieth part of this is ever in stock at any one date, so that at any time the world's bread supply would perhaps, in default of a renewal, not last much more than a fortnight.

Forage Crops.

In the investigation of forage crops of high, medium and low protein content it was found by the Minnesota station that crops like corn fodder, timothy hay, rape, pasture grass and hay crops from mixed grasses were materially inferior in nutritive value to the use of alfalfa. The maximum protein content was secured from alfalfa where the fertility had been maintained by the use of manures and crop rotations. Less fiber and from 25 to 30 per cent more protein were secured from forage grown upon soils where the fertility of plant food had been kept up than from that grown on similar and adjoining soils where the fertility had been allowed to decline. This emphasizes the importance of maintaining the fertility of the soil as a factor in producing forage not only of the large yield per acre, but also of the high nutritive value.

The leguminous crops as clover, alfalfa and peas do not appear to be as susceptible to the influence of fertilizer in increasing the protein content as crops like timothy, corn fodder and rape. The use of larger amounts of fertilizer, and other forage rich in protein results in a similar increase in protein content when the feeding with grain and mill products is discontinued.

An examination of a number of samples of clover, alfalfa, pea, bean, rape and millet seeds of known purity and uniform ripeness showed in the case of each sample two distinct types of seed, one of high and the other of low protein content. The two types of seed were darker in color and more numerous in character than the low protein seeds. It is believed that a selection of seeds on the basis of physical properties in the case of alfalfa, clover and peas may result in producing a crop of the maximum protein content in the same way as has been accomplished with wheat and corn.

The peach twig borer is one of the most important pests to the peach growers of Western Colorado, says a bulletin issued by the experiment station of that State. This injury is caused by a small pinkish-brown worm one-half inch long. The worm is the immature stage of a small grayish moth. The winter is passed by the worm, still very minute, in small chambers hollowed out within the spongy tissue of the bark at the crotches of small limbs. Early in the spring of about the same time the following of the peach borer, the green tufts upon the tips, the worms leave their burrows and attack the tender twigs, boring into them near the tips. This injury to the terminal tips constitutes an important injury to the tree. Young peach trees are usually worst injured.

The second generation of worms brings about another injury to the peach crop by making their way directly into the forming fruit, producing the "gummy" peach. Former recommendations for the control of this disease have been for spring applications of lime and sulphur washes. This has, in fact, been a most successful treatment, but the use of lead arsenate against the twig borer of the peach is destined to meet with equal popularity when its efficiency, cost and convenience of application and application are considered.

The arsenate of lead is recommended at the rate of three pounds of the paste to fifty gallons of water. The lime and sulphur wash should be used at the rate of fifteen pounds lump lime and fifteen pounds flowers of sulphur per fifty gallons of water, the two ingredients being boiled together in a small amount of water, for forty minutes, then diluted with enough cold water to make fifty gallons of spray. The two sprays, as applied, are of about equal cost—each a trifle over 1 cent per gallon, exclusive of cost of preparation. The use of lead arsenate spray is far more convenient in application and more pleasant to apply.

The spraying should be done at the time when the majority of the blossom buds are first showing their pink tips, and as late as they are unopened. Any arsenate of lead spray applied to peach trees must not contain free arsenic, as they are easily damaged by impure lead or lead diluted with water to contain too high a per cent of the poison, though pure.

Something of value has been ascertained by an agricultural experiment station regarding the sweet potato crop. The sweet potatoes "obeah" dug and banked after a long dry period generally keep well, while those dug and banked after a rainy season almost without exception keep poorly. A further rule is that "if the potatoes get out or broken and the milky juice turns to a dark greenish color when dried in the air, they will keep poorly, but if the juice dries white and the tubers show a tendency to heal over they keep well." It is recommended also "that the plants be set out as early in the spring as late frosts permit and to house or bank the crop only when thoroughly ripe, and to avoid all injury in harvesting."

Grafting Fruit Trees in Germany. Consul General Richard Guenther, of Frankfurt, reports a movement among German fruit growers for the purpose of getting rid of inferior and old-fashioned fruit trees and replacing them with the finest kind and best suited to the climate. A leading fruit-growing and horticultural journal published at Frankfurt-on-the-Oder, has devoted a number of essays to the subject, and has shown that the desired result can be achieved, even with very old trees, by grafting, and the simple stock or silt grafting is especially recommended. In Switzerland many thousands of old fruit trees are annually grafted in order to better meet the demands of the market. A leading fruit-growing and horticultural journal published at Frankfurt-on-the-Oder, has devoted a number of essays to the subject, and has shown that the desired result can be achieved, even with very old trees, by grafting, and the simple stock or silt grafting is especially recommended. In Switzerland many thousands of old fruit trees are annually grafted in order to better meet the demands of the market.

Acid Soils. A bulletin issued by the Oregon experiment station summarizes the results made by eight farmers in different parts of Oregon to a circular of inquiry sent out by the station regarding the character of the soil of their farms, the principal crops grown, and the reaction of the soil as determined by the litmus paper test. Of the eighty tests of soil for acidity made and reported by farmers, 10 per cent showed no acidity, 35 per cent very little acidity, 38.75 per cent considerable acidity, and 16.25 per cent strongly acid. The majority of the extremely acid soils examined in these tests were dark loam, medium, heavy or peat, which usually are rather poorly drained. "In a few cases upland sandy, gravelly clay loams have been found to be very acid. A majority of the sandy and clay loams examined possessed a considerable degree of acidity.

"Platanus and sorrel were found to be more common than other weeds on soil containing considerable or very much acid. These weeds also were quite common on soils containing little or no acid. "Acids in the soil are difficult to leach out. Acid soils may be improved by applications of quicklime, air-slaked lime, or wood ashes. The more thoroughly lime is incorporated with the soil the more effective will be its action on crop production."

Protect Plums from Curculio. Plums too often an uncertain crop on account of curculio, may be easily grown every year unless destroyed by frost. This is especially true of the old Damson plums, the rich flavor of which is now too little known in the scramble for the newer Japanese varieties.