

Alkali Problem In The Arid Region.

A RECENT interview published in a number of papers to the effect that sooner or later the alkali problem will result in the undoing of the west is a statement which has alarmed many persons who are fearful that the government in embarking upon irrigation development is launching into an unknown and dangerous enterprise. A "well known scientist," too modest, however, to allow the use of his name, stated in an interview at Washington "genuine arid countries are always ruined sooner or later by irrigation. Permanently successful irrigation is possible only in what we call humid or semi-humid regions, where the drainage is natural from clouds to sea. * * * When the water from irrigation soaks down a few feet into the surface soil and then slowly by capillary action rises to the surface, and is evaporated, it lifts with it the salts and there follows an increase of salts or alkali near the surface. * * * The roots of most crops hug the upper few inches of soil where the alkali accumulates and in time kills them."

"Science will have a great problem before it," he continues, "when the arid regions have by short sighted boomerang been filled up with a population which will finally discover that what at first

seems to be a most successful process of farming is a delusion. * * * Thousands of fine farms have been abandoned because of alkali 'rising' in the soil. Thousands more will be abandoned in the same way, and unlike the abandoned farms of New England, they will never be sought again by any one desiring to get back to mother earth. Babylon fell by the alkalinization of Mesopotamia. The valley of the Nile has escaped because there takes place there every year a thorough flooding, which washes down through the lowest depths of the soil and cleans it of all salts that are obnoxious. There are few places in our western country where this can be secured. * * * Unless some remedy is discovered for removing alkali the result is disastrous in the end, and it inevitably comes soon or late."

A more misleading interview was probably never printed. And it contains enough basis in fact to make it appear highly plausible.

Alkali there is throughout the west, in many places in such large proportions as to cause alarm and fear for the future of irrigation, until it was discovered that the trouble yielded easily to simple treatment. Science has already solved the problem and the growing population of the arid region will have no such

discovery to make as the anonymous Washington scientist predicts.

"Who is the man who made the statement?" said Secy. Wilson when the matter was called to his attention.

"Didn't give his name? Well, he must have something of lack of confidence in his ability to back up his statements. There is nothing in them. The soils bureau of this department has been studying the alkali problem in the west for years and our experiments have shown that ordinary underdrainage coupled with irrigation flooding will reclaim the worst alkali lands. Theoretically this has been known for a long time, but we have gone to work in a number of instances in Utah, California, Arizona and other western points and have practically demonstrated the proposition. The department scientists have studied our alkali conditions of typical irrigated districts covering over 3,000,000 acres of land."

As a matter of fact the valley of the Nile has not escaped alkalinization. Large tracts have been abandoned for years because of the excessive alkali and it is only recently that science has proceeded to reclaim these lands to agriculture. Thomas H. Means, in charge of the alkali reclamation work of the department of agriculture, recently made a trip to Egypt. He found tremendous areas undergoing reclamation. Lake

Abukir, situated near the Nile delta, is an old bed of 25,000 acres lying three or four feet below sea level. Before reclamation commenced it was a dry, salt plain in summer, upon which absolutely nothing would grow and in winter was covered with a few inches of strong alkali water. Today one sees green fields, luxuriant crops of cotton, corn, clover, and grass upon this once barren desert. The reclaimed land is worth from \$200 to \$300 an acre. In another region of the lower Nile delta Mr. Means found 123,000 acres undergoing a system of canalization, flooding and washing out the excess of alkaline salts. The first and second years after the washing commences, grass, cotton, clover, rice, etc., are planted. Mr. Means says in his official report:

"There is a great deal of land of this character in lower Egypt, and its reclamation is being carried on in most places with success and at a profit."

The tiling of land for alkaline washing costs even less than drain tiling as practiced on eastern farms. In the government demonstration at Salt Lake City, where the percentage of alkali is enormous, the lines of tiles are 150 feet apart.

In Fresno, Cal., much alarm was felt over the appearance of surface alkali on some of the best lands—worth \$300

and \$400 an acre—but the government demonstration of ditching and flooding on the 20-acre Tott-Hansen tract has shown the process simple, practical and cheap. Nor is there any waste of water in this process. On this tract an ample supply of water is flooded over the land, and crops planted. The water descending into the soil dissolves large quantities of alkali near the surface and carries it off in solution, but not in sufficient quantities, however, to prevent the drainage water being again used for irrigation on lower levels. In his report of this Fresno demonstration Mr. Means says:

"Land so tiled even if badly alkaline can be returned to profitable cultivation in six months if heavily irrigated, and within one year can be used for the production of any crop suitable to the climate."

At the recent irrigation congress at Ogden Mr. Means delivered an address on this subject in which he said that the results of the government's work "clearly shows that the large areas of alkali land in the west can be reclaimed at a cost far below the actual increase in the value of the land, and that those lands injured by seepage water can be returned to fertility, and the danger of the rise of alkali entirely obviated. It is thought that the

time will soon come when drainage will be as common in the irrigated districts as are the tile-drained fields of the middle west."

The alleged Washington scientist states that he has "seen water from Salt River, Ariz., show 157 parts of soluble salts in 100,000 parts of water—acutely dangerous to plant growth."

The division of soils last July issued a pamphlet showing that the Algerian Arabs are growing figs, pomegranates, melons, tomatoes, cabbage and other plants sensitive to alkali by using irrigation water which contains from 400 to 800 parts of soluble salts in each 100,000 parts of water, the gardens being freely irrigated and well drained.

The alkali problem in the west is one with which the irrigator and the engineer must contend, of course, but with available information and knowledge of the practice of irrigated countries thousands of years old, supplemented by intelligent scientific work, there is nothing in the situation to cause alarm to the most conservative.

The country must realize that while national irrigation is something of an experiment in this country, irrigation itself is old, has been in extensive practice for 20 years and that there are at present nearly 5,000,000 acres artificially watered. Now that the government

has come upon the scene, a new economical problem is presented, not whether water will irrigate crops profitably, but whether the nation can reclaim desert land and find settlers and homebuilders who will go upon it and take it off the hands of the government at the cost of its improvement. Unquestionably, in the opinion of those who are interested in the work, it can. With the work economically done, land will be furnished with a good water supply for \$10, \$12 or \$15 an acre, making it immediately worth to the farmer from four to six times the cost.

But in this connection the government should be improving, to the greatest possible extent, its own property, and when it has made the improvements—given the water to its land—it should transfer the land to the actual settler under the arid homestead law. But at the present rate of land grabbing which is going on, under the desert and other land laws, of every available tract of cultivatable land, which it is presumed will ever come under government irrigation, it cannot be very long before there will be little opportunity left for the nation to improve its own. Unless Congress shall repeal these statutes, the national irrigation program cannot be carried out in the intent in which the irrigation law was enacted.

TREASURE LOST AT SEA RECOVERED.

A Hundred Thousand Dollars' Worth Got Back from Staten Island Sound.

WAS BULLION FROM MEXICO.

Lost While Being Towed in a Barge, Loss Kept a Secret and Finally Found.

New York, Oct. 17.—Tales of treasure lost at sea do not generally have the happy ending of that just concluded through the work of divers and a dredge in Staten Island sound, off Seawaren, N. J. Silver and lead bullion worth \$100,000 have been recovered after lying at the bottom of the sound since Sept. 27.

The bullion came from the Mexican mines by way of Galveston on a Malory line steamer, and was on its way from the East river waterfront to the plant of the American Smelting & Refining company, near Perth Amboy, N. J. There were 7,378 pigs of the metal on the deck of the barge Harold. In company with 13 light canal boats the treasure ship was taken in tow by a tug. It was the last boat in the line. Under a moon nearly full the night was brighter than many days. There was no wind. Peter Moore, captain of the barge, spent the evening chatting with the canalers alongside as the tow dragged slowly across the upper bay into the Kill von Kull. The Harold was not as comfortable as might be, so when bedtime came he accepted an invitation to sleep aboard the canalboat. After all hands had turned in the barge rolled to starboard under the weight of 400 tons of metal and dumped the whole mass except about 200 pigs.

into the water. She righted immediately and went along as peacefully as before. Some of the metal landed on the canalboat deck and Moore was awakened. He hailed the pilot of the tug but had no megaphone, and the pilot kept the tug on the move. Moore failed to notice that a fortune had disappeared from his craft while he slept. The barge appeared to be moving along all right and he went back to his bunk.

When the boats drew up in the morning at the pier in New Jersey there was a surprise awaiting the smelter officials and everybody was sworn to secrecy. Insurance companies were notified and preparations quickly made to search the bottom of the sound for the lost pigs. The waters in that portion of the bay are known to be infested with pirates who go about in small boats preying on canalboats and coal barges. They are considered dangerous men and great fears were entertained that they might learn of the affair and locate the treasure. Launches were hurried to the scene and for more than a week, while the men aboard pretended to be fishing, sounding lines were being passed over the sandy bottom. Finally, Oct. 5, the search was rewarded when the line gave a metallic answer to the tapping of the lead.

Divers went down and found nearly an acre of the bottom covered with the bullion. A dredge immediately was put into commission and the work of recovery went rapidly on until nearly 83 per cent of the treasury had been brought up. The divers then went down again and gathered up what the dredge failed to reach and the insurance company officials breathed a sigh of relief as their loss will now be a small one, comparatively. The bullion was a mixture of lead and silver, the latter making up fully three-quarters of its value, which will be separated and refined at the Perth Amboy works. Capt. Baxter of the salvage crew said the next few days' search will decide how long divers shall continue at work but he is satisfied not enough remains on the bottom to make it worth any amateur diver's while to turn in and help without an invitation.

Mining Operator Killed.

Joplin, Mo., Oct. 16.—Gordon Allen, 32 years of age, a well known mining operator, was shot and instantly killed this afternoon by Benjamin Aylor of Webb City at the Aylor mine near Prosperity. Aylor is a son of J. W. Aylor, the millionaire mine owner. There were no witnesses of the shooting. A loaded revolver was found in Allen's pocket and it is alleged that

he had threatened to kill Aylor. Aylor was arrested, but not placed in jail pending the verdict of the coroner's jury.

There had long been ill will between the men because Aylor foreclosed a mortgage against Allen nine years ago. The men met today, became involved in a quarrel and Aylor drew a pistol and fired five shots at Allen, three taking effect.

A DIVORCED WOMAN.

Episcopal Clergyman Who Married One Has Trouble.

Philadelphia, Oct. 16.—A matter that may become a celebrated case in the Protestant Episcopal church in America became public today, when the announcement was made that Bishop John Scarborough of the diocese of New Jersey had refused to approve the call to a church within his jurisdiction of a clergyman married to a woman who had been granted a divorce from her first husband, also an Episcopal clergyman.

The case is that of Rev. George F. Kettell, formerly assistant rector of Christ church, Baltimore. His wife was originally Miss Beale Broughton of Pocomoke City, Md. She married Rev. Clarence Frankel in February, 1900, and six months later they moved to Nebraska, where her husband was a missionary. Later she secured a divorce in South Dakota on the grounds of non-support, unfaithfulness and cruelty.

CHARGES AGAINST CHASE.

They Are Perjury and Disobedience of Orders.

Denver, Oct. 16.—It was definitely learned today that the charges on which Brig.-Gen. John Chase of the Colorado national guard had been summoned before a military court next Monday are perjury and disobedience of orders. The perjury is in connection with the imprisonment of Davis, one of the strike leaders at Cripple Creek. Gen. Chase signed court papers which stated that Davis had been released. His friends say he did not read the papers carefully and committed the act inadvertently. His enemies say that is no excuse for the act.

Charges against Col. Frederick Gross and Col. Frank Kimball have been formulated by Maj. Arthur H. Williams and Gen. Chase. They allege that loaded revolvers were drawn by Gross and Kimball on Maj. Williams and two orderlies. Gen. Chase will file charges with the governor against Adj.-Gen. Sherman Bell, but the gov-



JUDGE GROSSCUP, WHO ADVOCATES NATIONAL SUPERVISION OF CORPORATIONS.

United States Circuit Judge Peter S. Grosscup of Chicago has created a good deal of a sensation by his speech advocating the taking of control of corporations away from the states and putting it into the hands of the national government. He also suggests the possibility of a new party in the following words: "When some great national party shall have taken up this whole subject of corporate combinations with this purpose in view and shall have received the mandate of the American people to go ahead, the constitutional means for the changes I have named will be at hand."

error, it is intimated, will not hand them to the judge advocate unless Chase should demand a special court-martial.

SERBIAN REGICIDES.

The Skuptschina Approves of Their Murderous Deeds.

Vienna, Oct. 16.—The Neue Tagblatt asserts that King Peter of Serbia will visit the Austrian and Russian courts in December. As he is the courts have declined to receive Serbian officers. It is evident that King Peter can only take with him a civil suite. It is reported from Belgrade that the skuptschina, in an address to the throne, has just expressed its approval of the murders of King Alexander and Queen Draga. The address said:

"By this act the army has shown its oneness with the people and its love of country."

Belgian Socialist Stabbed.

Brussels, Oct. 16.—M. Pepin, a Socialist member of the chamber of deputies, was stabbed tonight at Mons while walking on the street with some friends. There are slight hopes of his recovery. The assassin struck M. Pepin from behind and succeeded in making his escape.

Two Horse Thieves Killed.

Great Falls, Mont., Oct. 16.—A gang of horse thieves who tried to run horses off the Fort Peck reservation last night were ambushed and two of them killed. The Indians engaged in a running fight with the outlaws, driving them off the reservation. The dead men have not been identified.

BOUNTY FED STEEL.

It Is Said to Be Coming to United States from Canada.

Washington, Oct. 16.—Complaint has been made to the treasury department that the Dominion Iron and Steel company of Canada has been exporting bounty-paid steel into this country. It is claimed that the Australian government pays a bounty of \$2 per ton on pig iron and \$2 more on steel produced from this iron, making a total bounty of \$4 and that this steel is brought to Canada and then to the United States.

It is asserted by those making the complaint that the countervailing duty against bounty-paid products should be applied to this steel.

Armentiers Rioters Arrested.

Paris, Oct. 16.—Forty-one persons have been arrested at Armentiers, Department du Nord, for being implicated in the riots, pillage and incendiarism in that town a few days ago. The prisoners are alleged to be habitual criminals.

Defaulting Bank Clerk Insane.

Louisville, Oct. 16.—Albert L. German, alleged defaulting clerk of the Third National bank, was adjudged insane today by a jury in the federal court. German was charged with a shortage in his accounts of between \$20,000 and \$30,000.

Irish Would Follow Emmet.

New York, Oct. 17.—Speaking at a meeting at Ballinborough in honor of the Robert Emmet centenary, says a despatch from Dublin to the Times, William H. K. Redmond, M. P., declared that if the people of Ireland had the power today to follow in Emmet's steps and free their country as the Americans won freedom, they would do so.

A Savage Street Fight.

Chicago, Oct. 17.—A savage street fight in which one workman was badly beaten occurred last night as a result of the strike of the Franklin Union of Press Feeders.

The assault was the culmination of several days of disorder. A gang of men, declared to be Franklin union pickets, attacked a number of employees of the R. R. Donnelley & Sons company. In the fight which followed Frank Labow was so badly beaten that the police took him to the county hospital. A number of other Donnelley employees were struck but not seriously hurt. The police arrested three men, Fred Ketchum, John Muecher and Charles Smith. With a number of their fellows they will be taken before Judge Holden today for violating the injunction, which prohibits all interference with the men who have taken the place vacated by the Franklin Union members.

It's WELL WORTH time to buy a pair of these swell new fall model, we are showing in this famous \$3.50 shoe for men.

The reason that these shoes are better than the shoes ordinarily sold at this price is because we pay more for them.

We do everything but make these shoes—select the leathers ourselves and they are made as we dictate. The only way in which they differ from the ordinary \$4 and \$5 shoes hereabouts is in the price—They are always \$3.50. See North Window Exclusive Display.

HIRSCHMAN'S
SHOE PEOPLE

THE WELL WORTH \$3.50 SHOE

THE VARSITY

Only a name given to our stylish young mens suits, but there is a snap and style about them that you have never before seen. Come in and try one on, we can fit you in the nobbiest suit you ever saw for \$15.00.

If you'll pay \$20. or \$25. we will give you hand made garments and these hand tailored suits are equal to the best that are produced by high class custom tailors and the price is HALF.

RICHARDSON AND ADAMS,
172 Main Street.

Back Volumes

OF THE

CONTRIBUTOR

At \$1.00 Each.

This valuable magazine, which was published from 1875 to 1898, and the contributors to which include all the foremost thinkers and writers of the Church during one of the most interesting periods of its history, is now rapidly going out of print. No copies of volumes 3 and 4 are now to be purchased. Volumes 1, 2 and 5 are very scarce and command a premium. The "News" will sell

Volumes 6 to 17 at ONE DOLLAR EACH.
12 VOLUMES FOR \$12.00.
Postage Extra.

DESERET NEWS BOOK STORE.
Successors to Cannon Book Store.

HIGH CLASS DRUGGISTS AND — OTHERS.

The better class of druggists, everywhere, are men of scientific attainments and high integrity, who devote their lives to the welfare of their fellow men in supplying the best of remedies and purest medicinal agents of known value, in accordance with physicians' prescriptions and scientific formula. Druggists of the better class manufacture many excellent remedies, but always under original or official names and they never sell false brands, or imitation medicines. They are the men to deal with when in need of anything in their line, which usually includes all standard remedies and corresponding adjuncts of a first-class pharmacy and the finest and best of toilet articles and preparations and many useful accessories and remedial appliances. The earning of a fair living, with the satisfaction which arises from a knowledge of the benefits conferred upon their patrons and assistance to the medical profession, is usually their greatest reward for long years of study and many hours of daily toil. They all know that Syrup of Figs is an excellent laxative remedy and that it gives universal satisfaction, and therefore they are selling many millions of bottles annually to the well informed purchasers of the choicest remedies, and they always take pleasure in handing out the genuine article bearing the full name of the Company—California Fig Syrup Co.—printed on the front of every package. They know that in cases of colds and headaches attended by biliousness and constipation and of weakness or torpidity of the liver and bowels, arising from irregular habits, indigestion, or over-eating, that there is no other remedy so pleasant, prompt and beneficial in its effects as Syrup of Figs, and they are glad to sell it because it gives universal satisfaction.

Owing to the excellence of Syrup of Figs, the universal satisfaction which it gives and the immense demand for it, imitations have been made, tried and condemned, but there are individual druggists to be found, here and there, who do not maintain the dignity and principles of the profession and whose greed gets the better of their judgment, and who do not hesitate to recommend and try to sell the imitations in order to make a larger profit. Such preparations sometimes have the name—"Syrup of Figs"—or "Fig Syrup"—and of some piratical concern, or fictitious fig syrup company, printed on the package, but they never have the full name of the Company—California Fig Syrup Co.—printed on the front of the package. The imitations should be rejected because they are injurious to the system. In order to sell the imitations they find it necessary to resort to misrepresentation or deception, and whenever a dealer passes off on a customer a preparation under the name of "Syrup of Figs" or "Fig Syrup," which does not bear the full name of the California Fig Syrup Co. printed on the front of the package, he is attempting to deceive and mislead the patron who has been so unfortunate as to enter his establishment, whether it be large or small, for if the dealer resorts to misrepresentation and deception in one case he will do so with every other medicinal agent, and in the filling of physicians' prescriptions, and should be avoided by every one who values health and happiness. Knowing that the great majority of druggists are reliable, we supply the immense demand for our excellent remedy entirely through the druggists, of whom it may be purchased everywhere, in original packages only, at the regular price of fifty cents per bottle, but as exceptions exist it is necessary to inform the public of the facts, in order that all may decline or return any imitation which may be sold to them. If it does not bear the full name of the Company—California Fig Syrup Co.—printed on the front of every package, do not hesitate to return the article and to demand the return of your money, and in future go to one of the better class of druggists who will sell you what you wish and the best of everything in his line at reasonable prices.