NEWS FROM THE NATIONAL CAPITAL

GRAFT IS DENIED.

Secretary Garfield Says Idaho Reclamation Service Is Clean.

Washington, April 16. — Secretary Garfield today exploded the charges of graft in the reclamation service in Idaho by officially notifying Director Newell that the accusations against Engineer D. W. Ross and his assistant secretary had been found to be without foundation and had been dismissed, following this announcement by promoting Mr. Ross from $3,600 to $4,000, and Mr. Horn from $3,300 to $3,600.

The report against Ross and Horn was made by Special Inspector A. R. Green, who spent some time in Idaho making investigations and who gleaned his information from government contractors. Green based his charges on statements made by the contractors on the Boise-Payette project. His conclusions were utterly disapproved by Secretary Garfield.

Land Officers Named.

Washington, April 12.—On recommendation of Senator Bourne, concurred in by Senator Fulton, the president today appointed Charles W. Moore, of Grass Valley, as register of The Dalles land office to succeed M. T. Nolan, removed, and named Louis H. Arneson, of Hood River, as receiver of that office to succeed Miss Anne M. Lang, whose term expired March 3. Both senators have given considerable time to the selection of new officers for The Dalles land office, it being their desire not only to obtain men thoroughly qualified, but men against whom no charges can properly be made. Many candidates appeared in the field, some of them strongly indorsed politically.

Foreign Crop Good.

Washington, April 17.—The European crop report of the Agricultural department, covering conditions abroad up to April 1, says that the heavy snow which fell last winter over the greater part of Europe, has, excepting in parts of Russia and the Balkan states, almost everywhere disappeared. That the protection afforded to winter cereals has been generally efficacious is being demonstrated by the vigor with which the plants in most countries seem to be responding to the quickening influences of spring.

Have Observed Rules of War.

Washington, April 11.—Senor Echasaretta, the Nicaraguan consul at New Orleans, advises the Nicaraguan legation in this city that according to a communication from General Juan Estrada, the general commanding the Nicaraguan expedition engaged in capturing Hondurian ports, explicit instructions were given to the general to follow strictly the rules and regulations in accordance with international law when nations are at war, guaranteeing life and property of every neutral citizen at the different places where his forces are stationed

Pacific Fleet Is Organized.

Washington, April 17.—For the first time in the history of the American navy there has come into existence "the Pacific fleet," comprising three squadrons, one with headquarters at San Francisco and two in Asiatic waters. Admiral Dayton cabled the Navy department from Manila that he has hoisted his flag upon the armored cruiser West Virginia as commander in chief of the entire Pacific fleet. In organization the new fleet will correspond to the Atlantic fleet, which is under the command of Admiral Evans.

No Compromise Possible.

Washington, April 11.—"The next Republian National convention will nominate Theodore Roosevelt or else a reactionary," declares one of the most adroit politicians known in the national capital. "There will be no compromise candidate next year, no candidate acceptable to Roosevelt and yet acceptable to the money power. Either the people will rise in mass and force the nomination on Roosevelt, thus overwhelmingly endorsing his course, or else they will meekly bow down and wear the yoke of unscrupulous capital."

More Time to Build Bridges.

Washington, April 11.—An extension of six months has been granted the International Contract company, of Seattle, for completion of its contract for construction of highway bridges over the main canal of the Klamath irrigation project. The contract called for completion March 5, 1907. The extension was granted because the company experienced unavoidable delay in obtaining timber. The contractors have agreed to make temporary crossings.

500,000 in Six Months.

Washington, April 17.—According to a statement issued today by the bureau of immigration, the total immigration to the United States from all countries for the six months ending March last aggregated 539,137 persons, which is an increase of 75,821 over a like period in 1906. The total number of immigrants from Russia for the six months ending March last was 103,364, being an increase of 21,631 over the corresponding period of 1906.

Gives Ohio Negro an Office.

Washington, April 12.—The president appointed Ralph W. Tyler, a negro, of Columbus, O., to be auditor of the treasury of the Navy department. Tyler is the man who it was announced had been considered by the president for a Federal position in Ohio, particularly that of surveyor of customs at Cincinnati.

Lost Barge Found.

Washington, April 12.—The nine men who were on coal barge No. 1, which was lost in a storm off the Florida coast, while being towed by the navy collier Caesar, have been landed at Galveston, Texas, by the German steamer Professor Woermann.

Catholics Discuss Affairs.

Washington, April 11.—The affairs of the Catholic church in America and the Catholic university in this city are to be the subject of consideration by the Catholic hierarchy, which is to hold meetings here this week.

BORAH GOES TO ROOSEVELT

Idaho Senator Asks to Have Action On His Case Postponed.

Washington, April 17.—President Roosevelt has been appealed to by Senator Borah, of Idaho, to review his indictment by the Federal grand jury with a view to postponing action until after the trial of Moyer, Haywood and Pettibone, the men accused of murdering Governor Steunenberg, of Idaho.

Senator Borah is the special counsel engaged by the state to prosecute these officials of the Western Federation of Miners. The appeal of Senator Borah places the president in a rather embarrassing position.

In the event the president withholds the action against Senator Borah, it will be charged that he is showing favors to those who are prosecuting the miners, and if he does not, Senator Borah will be seriously embarrassed in the prosecution of the miners charged with the murder of Steunenberg.

OLD SOLDIERS NOT TOO OLD.

President Says They Must Not Be Dismissed From Service.

Washington, April 13. — R. B. Brown, commander-in-chief of the Grand Army of the Republic, Corporal Tanner, past commander-in-chief, and various officials of the local organization, called on the president today in reference to the alleged dismissal from the government departments of many veterans of the Civil war, and of their widows, for no other cause than old age.

Some time ago the president took up this question at a cabinet meeting, and gave instructions that discriminations against the veterans or their widows should cease. During the call today of Commander Brown and his friends, the president informed them of the instructions he had given, and assured them that the old soldiers should be cared for.

Civil Service in the South.

Washington, April 16.—Civil Service Commissioner McIlheny, who is a Southerner and a Democrat, is entering on what he terms a campaign of education in the South in regard to the function and character of the commission. He found that one of the greatest difficulties in securing efficient service for the government in the South was the fact that the whites have conceived the idea that the service is meant especially for the negroes, and as a consequence when an examination for positions is held it is generally attended largely by negroes, the proportion often being ten to one.

Duty to Postoffice First.

Washington, April 17.—That the duty to the government of postoffice clerks and carriers who are members of militia companies is paramount to that of their military service except at critical times, is the decision of First Assistant Postmaster General Hitchcock regarding the employes of the postoffice at Lorain, O., on strike duty at Lorain, with a company of the Ohio National Guard. The postmaster accordingly has been notified to have Captain A. F. Gove and Sergeant Phinney either return to work immediately or resign.

Fleet of 36 Warships.

Washington, April 13.—Having completed an elaborate program of exercise and target practice, the battleship division of the Atlantic fleet sailed from the naval station at Guantanamo, Cuba, yesterday for Hampton Roads to participate in the ceremonies incident to the opening of the Jamestown exposition. When assembled in Hampton Roads there will be an aggregate of 36 warships of various types, constituting the most powerful fleet ever assembled in American waters.

Georgia Rate Cases Set.

Washington, April 13.—The Interstate Commerce commission has set for hearing in this city April 18 the case of the Enterprise Mining company against the Georgia Railroad company and others, alleging unreasonable and discriminating rates on cotton from various southern points via Pacific Coast terminals to Shanghai and other ports in Japan and China, and also a practically similar case against the same railroad filed by the China and Japan Trading company and others.

Sober, Sane Proposals.

Washington, April 11.—"I find the president and I are absolutely in accord as to the importance of confining the efforts of the propaganda to sober, sane and practical proposals which can be carried out." These were the words used by W. T. Stead, of London, who has come to America to attend the peace conference in New York, after an hour's talk with the president at the White House this afternoon, at which the coming peace conference at The Hague was a prominent feature. Mr. Stead was accompanied by Dr. Albert Shaw.

Bonilla Becomes Exile.

Washington, April 17.—The Navy department is informed that the gunboat Princeton left Amapala on Saturday with President Bonilla, of Honduras, on board. It was stated that President Bonilla would be landed at Salina Cruz, Mexico. His departure is in compliance with an agreement entered into between President Zelaya, of Nicaragua and President Figueroa, of Salvador, that the Hondurian president leave the country.

Would Be "Cadet" or "Middy"

Washington, April 16.—The State department has received an inquiry from Hamilton King, American minister to Siam, asking whether it would be possible to admit to the Naval or Military academy a nephew of the king of Siam.

Cuba Accepts Taft's Program.

Washington, April 16.—The War department today received a dispatch from Governor Magoon, of Cuba, saying that the plans for the elections in the island, which were made by Secretary Taft, are satisfactory to everybody.

REDUCE HARRIMAN POWERS.

Union Pacific Directors Believe He Has Too Great Control.

New York, April 12.—Some of the directors of the Union Pacific railroad favor a material reduction of the extraordinary powers conferred upon its president, Edward H. Harriman, which make the company a one-man affair.

At present the executive committee has all the powers of the directors when the latter are not in session, and Mr. Harriman has all the powers of the executive committee when that body is not in session. In other words, Mr. Harriman can do as he pleases, except for the few minutes once a week or once a month, when the committee is in session.

He has a power of attorney and could sell the millions upon millions of the securities of other roads owned by the Union Pacific at what price he pleased, or he could hypothecate securities, borrow tens of millions upon them from banks and engage in stock market operations on a colossal scale.

In the hope of appeasing the Union Pacific stockholders and eliminating the public distrust in the securities of the Harriman roads, it is proposed to put some new blood in the executive committee, reorganize the body and adopt resolutions taking away from Mr. Harriman some of the powers which have provoked so much criticism.

GIVE GOOD REPORT.

Congressmen Say Work on Canal Is Progressing Rapidly.

Washington, April 12.—Chairman Tawney, of the house committee on appropriations and Representative Olcott, who have recently returned from a visit to the isthmus of Panama, today discussed with the president conditions as they found them. Mr. Tawney is favorably impressed with the progress being made in the canal work, and told the president he thought that at the present rate the waterway should be completed in five years.

He said he regarded it as unfortunate that the engineering world had been representing to the people that an almost impossible engineering problem confronted it. The principal conditions now to be met, he said, were those of sufficient railroad capacity to take care of the dirt excavated, and sanitation with the view to keeping the place in a good, healthful condition.

Mr. Tawney also discussed with the president questions affecting congressional appropriations for canal work, and it is likely some legislation bearing on the subject, will be recommended to congress as the result of the visit to the isthmus.

PREMIER DEFIED BY PUBLIC.

Questions Authority to Forbid Gathering of Statistics.

St. Petersburg, April 12.—Premier Stolypin, in attempting to limit the competence of the lower house of parliament by forbidding its committees to obtain statistics from the Zemstvos and avail themselves of outside expert advice, has been defied by the public. President Golovin had written a curt letter to the premier asking him on what grounds and under what law he is entitled to address such demands to the imperial parliament. The law, M. Golopin says, contains a paragraph authorizing the lower house of parliament to interpellate the government but nowhere was there a reciprocal right on the part of the ministers.

The actions of President Golovin and the budget committee were taken after a long conference between the president and leaders of all the parties in parliament except the extreme right, and brings the issue squarely before the cabinet.

The discussion of the budget in committee is expected to last from four to six weeks. The estimates probably will be accepted, with minor changes by the house, when presented.

Obey Colorado Laws.

Denver, April 12 —Insurance Commissioner Rittenhouse, who has been in Indianapolis for several days conferring with the officials of the State Life Insurance company, of Indiana, whose license to do business in this state was revoked recently, telegraphed State Auditor Statler yesterday to issue a new license to the company, which was done. The company agreed to abandon its plan of issuing stock to policyholders, which was construed as a violation of the state law, resulting in their permit being cancelled.

Ruef May Receive Visitors.

San Francisco, April 12.—A partial ruling in favor of Abraham Ruef was the immediate outcome this morning of Ruef's petition to the Supreme court for a writ of habeas corpus releasing him from the custody of Elisor Biggy. The court instructed that henceforth the elisor shall permit Ruef to see within reasonable hours any person whom he desired to see and to talk to his attorneys, his witnesses, the members of his family and other persons with whom he has business outside of the hearing of his guards.

Strike May Cause Flood.

Chicago, April 12.—Chicago and suburbs are exposed to the danger of flooded basements and general damage by water through a strike of drain pipe layers called yesterday. Practically all the laborers employed in this work walked out when their employers refused to concede an advance of 50 cents a day in wages. About 800 are on strike. The drain men have been receiving $3.50 a day, while the "helpers" have been getting $2.50.

Navy to Have Four Bases.

Shanghai, April 12.—It is said the organized navy of China is to have four bases, one on Chang Chow island, one in the Miao Tao group, a third in the Chusan archipelago and a fourth on Hainan island. The scheme involves the outlay of 12,000,000 taels annually for the construction of new moderate sized armored cruisers, a number of torpedo boats and a dozen submarines.

FOR OREGON CLAIMS

Commissioner Ballinger's Rush Action on Land Patents.

GREAT WRONG HAS BEEN DONE

Assures Senator Bourne That No More Claims Will Be Held Up on Mere Suspicion.

Washington, April 13.—Land Commissioner Ballinger today assured Senator Bourne of his intention of "raising the lid" in Oregon, meaning that he intended to take up and pass all valid public land entries that have long been under suspension in that state.

A great many entries were held up by the old administration on mere suspicion that there was something crooked about them. There was no actual evidence of wrongdoing or wrong intent on the part of these entrymen. Mr. Ballinger will pass to patent every Oregon entry which, upon examination, appears to be made in good faith, and those entries that are irregular or show evidence of fraud will be examined as promptly as possible and appropriate action taken.

Mr. Ballinger agrees with Mr. Bourne that Oregon has suffered unjustly in late years, and he is willing to do everything in his power to place the state on the same footing with all others. He has hopes of disposing of all pending entries during the coming summer, and it is his expectation that a great many will pass to patent in the near future.

The commissioner is rapidly putting the land office on a sound business basis, he himself working until midnight every night at reorganization. He is determined to make the land office a thorough business institution and bring its work up to date.

DOLLAR SAVES A LIFE.

America Urged to Give $3,000,000 for Chinese Sufferers.

Shanghai, China, April 13.—Telegrams received here from 20 points in the famine district reported that the conditions are growing worse.

The Chinese government and people, up to date, have contributed more than four million dollars for famine relief, and the sums received from all foreign sources total half a million dollars, including the supplies on their way from America.

The relief committee here is promptly sending supplies to the front, but the funds are not yet in its possession. Measures adopted up to date are inadequate. Ten million persons are suffering from lack of food and facing starvation.

A dollar, the relief committee reports, will save one life until the harvest, June 25, and $10,000,000 is needed. The whole amount cannot be raised in China. The situation is desperate, and Americans are urged to give $3,000,000 in the next three weeks, not for Christians, but for humanitarian works. It is suggested that it would be best to cable money to the consul here, James Linn Rodgers, as supplies can be purchased in Shanghai.

SANTA FE MUST STAND TRIAL.

Judge Welborn Declines to Quash Indictments for Rebating.

Los Angeles, April 13.—In a lengthy verbal opinion, Judge Olin Welborn, in the United States District court, declined to quash the indictments against the Santa Fe Railroad company for alleged rebating, and the company must stand trial upon 65 separate counts. Judge Welborn's opinion reaffirmed the doctrine set forth in the American Tobacco company case, that a corporation is not a person, as defined in the fourth and fifth amendments to the constitution of the United States, and may be compelled to give testimony tending to incriminate itself.

Judge Welborn gave the defendants permission to file a demurrer, if they desire to do so, by April 22.

Buy Off Canadian Sealers.

Ottawa, Ont., April 13.—Sir Mackenzie Bowell, in the senate today, read a cable dispatch from Great Britain saying that an agreement had been reached between the United States, Great Britain and Canada, whereby Canada agreed to give up deep sea sealing rights for a monetary consideration. Mr. Scott said in reply that, as far as the Canadian government knew, nothing had been done toward abrogating the agreement made two or three years ago as to the seal fishers.

Glass Case Again Postponed.

San Francisco, April 13. — Louis Glass, vice president of the Pacific States Telephone company, appeared before Judge Lawlor in the Superior court today to answer the indictment which charges him with tendering a birre. It was stated that another indictment has been found against him but not yet filed, and by agreement the case was postponed one week so that all the indictments may be heard at the same time. Sheriff O'Neill reported again that he was still unable to find A. K. Detweiler, the Toledo capitalist.

Woman Was Go-Between.

St. Petersburg, April 13.—Senator Kimpe today took the testimony of several notorious women connected with the grain contract scandals. It was established that a woman had acted as a go-between from M. Gurko, the assistant minister of the interior, and M. Lidval. Sensational developments are expected at the senate session of April 27, when the case of Baron Federicks, governor of Nizni Novgorod, implicated in the scandals, will be heard.

Smuggled Japanese Caught.

El Paso, April 13.—Inspector Shumacker, in charge of the immigration office here, received a telegram today telling of the capture of eight smuggled Japanese. Five were caught at Fort Worth, one at Pecos and two at Albuquerque. They had crossed across the border east and west of the station.

WRECK ON O. R. & N.

Sinking Fill Near Cayuse Casts Train Into Ditch.

CARS BREAK LIKE EGG SHELLS

Four Persons Killed, Four Seriously Injured and More Than Score Badly Hurt.

Pendleton, April 11.—Four persons were instantly killed, four seriously injured and more than a score of others cut, bruised and badly shaken up in the worst wreck in the history of the O. R. & N., which occurred yesterday morning about 3:30 o'clock near Cayuse station, about 15 miles east of this city, just at the foot of the Blue mountains. The monster engine turned a complete somersault in the air, and, now, completely wrecked, is standing on end in the Umatilla river. The mail car, two baggage cars and a smoker are piled in a heap, the former being smashed into kindling wood.

No passenger coaches with the exception of the smoker left the track, though passengers were hurled from their seats and berths, many of them receiving severe cuts and bruises. The smoker was left standing nearly on end and the occupants were thrown in a heap to the front end of the car, which was crushed in like an egg shell. Why many of them were not instantly killed and all seriously mangled cannot be explained by the trainmen.

The train was passenger No. 5, in charge of Conductor Coykendall, four hours late and moving at a slow speed, which acounts for the small number of passengers injured. The wreck was caused by a fill across the gulch giving way under the weight of the engine.

COMING IN DROVES.

Thousands of Homeseekers Flocking Westward Daily.

Portland, April 11.—After making a careful estimate of the colonist business coming West, A. D. Charlton, assistant general passenger agent for the Northern Pacific, who has just returned from the East, estimates that between 5,000 and 7,000 homeseekers are leaving the Eastern gateways daily and that this tremendous movement will continue during the season.

Mr. Charlton paid particular attention to the colonist movement while away. He personally visited the depots, where crowds of west bound homeseekers are flocking to the trains and crowding the coaches. Many, not finding seats, are even willing to stand, so eager are they to get to the new promised land.

The Northern Pacific, according to Mr. Charlton, is hauling between 2,500 and 3,000 colonists out of St. Paul, Minneapolis and Duluth every day. The Great Northern and 'Soo" lines, of course, takes a great many more. Taking the southern gateways into consideration, Mr. Charlton believes that the total number leaving for the West with the avowed intention of making their homes here will run close to 7,000 every day of the 60-day season.

JUDGE BOISE DEAD.

One of Oregon's Ablest Jurists and Pioneer of Coast.

Salem, April 11.—Judge Reuben Patrick Boise, one of the earliest pioneers, ablest jurists, founders of the fundamental laws, and moulders of the destiny of the state of Oregon, passed away at his old home in this city shortly after 2 o'clock yesterday afternoon. His malady was a combination of stomach and kidney trouble. He had reached the advanced age of 87 years, 9 months and 22 days.

There was perhaps no better known and prominent man in the public mind of the state of Oregon or the Pacific Northwest than Judge Boise. He was one of the three who framed the first code of laws of the Oregon territory; one of the few surviving members of the constitutional convention of the state.

Hermann's Bad Showing.

Washington, April 11.—Binger Hermann made no better showing under cross examination yesterday than he did the day before. His course was practically the same, his statements at times contradictory, and some of his testimony was directly disproved by his own letters, which were introduced in evidence. As before, unfavorable transactions were exposed which will not tend to prejudice the jury in favor of the defendant. Opinion is general that by going on the stand Hermann has done his cause much harm.

Try to Kill Grand Duke.

St. Petersburg, April 11.—It was announced today that another attempt on the life of Grand Duke Nicholas Nicholaievitch had been frustrated. The grand duke was returning from Tsarskoe-Selo by train at 2 o'clock this morning. When the train was 13 miles from St. Petersburg it was brought to a sudden stop by a fusilade of shots from the track side. The sentry said he had seen four men hiding behind an embankment. The men succeeded in getting away, though several shots were fired at them.

Will Pay Honor to Heney.

San Francisco, April 11.—Francis J. Heney will deliver an address to the students of the University of California at Berkeley tomorrow. It is stated that Mr. Heney is to be given an honorary degree by the university authorities in recognition of his work for civic reform. Mr. Heney was a student of the university 20 years ago and was expelled as the result of a fight with the editor of the college paper, with whom he had trouble.

Drouth Kills Cuban Cattle.

Havana, April 11.—The rural guards report the death of hundreds of cattle throughout the island as a result of the continued drouth. Cuba has not had a good rain since the October cyclone and the crops are suffering.

FARM AND GARDEN

How to Grind an Ax.

To get the best results in grinding an ax we must have a long, thin bevel, says a correspondent of the American Cultivator. To have this bevel usable the tool must be of the best steel, properly tempered. Now to the second point. We say that our bevel must vary according to the hardness or softness of the wood to be worked. Why? Because in an ax the cutting edge simply

WRONG WAY.

consists of the middle layer of fibers in the blade; next to them is the next layer, a little farther back, and so on right through.

Thus we can see that the edge only keeps sharp because the layer of fibers lying next to it overlies it and prevents it from beaking away by lending it part of its elasticity. The third layer does so to the second, and so on right through. The harder the timber the shorter the bevel, the softer the timber the longer, in reason. Hold the ax as shown in the second cut and keep the edge at right angles to the stone; travel the blade up or down a little when grinding the corners. Always turn the stone toward the edge; this applies to all edge tools, for two reasons: Turning from the edge will always grind a round, coarse bevel; the points of the fibers are left much more loose and open, thus giving much less elasticity than when compacted together as they are by the stone turning to them. Never grind dry; it heats the steel thereby, as shown by taking the temper out of it. Never grind in the center of the stone, as so many do, with the edge parallel to the stone, as it spoils the stone for grinding and twists the fibers of the steel at right angles to their proper cutting angle. Always give the blade (not the eye) a dip in clean water after grinding.

The blade clean, now take a slip, oil stone or ax stone and gently rub straight across the bevel and then up and down, to rub off any wire edge and to unlock the edge fibers. Make the first rubs the hardest and the last the lightest. The practice so common of giving the edge a few light turns on the grindstone, parallel to the stone,

RIGHT WAY.

to rub off the wire edge and save rubbing on the finer stone is a bad one even when the stone is a very fine grit, as it disturbs the edge fibers and roughens them up into little saw teeth which soon chew off in use.

Milk Records.

Several methods of estimating yearly records from a few weighings and test have been proposed. The only absolutely accurate way to tell the amount of milk and butter fat produced by a cow is to weigh and test the milk at every milking. Cows vary so much in the amount and quality of their milk from one milking to another, owing to various causes, many of which are uncontrollable, that entirely accurate results cannot be secured by weighing and testing the milk secured at a few milkings and using the results as a basis for estimating the total production for a lactation period or even a month. Many dairymen, however, do not feel they can take the time to secure daily records; nor is this necessary if it is simply desired to obtain a reasonably accurate estimate of a cow's performance at the end of the year. An approximate record is sufficient for comparing one cow with another or for determining whether a cow is up to the profit standard.—C. B. Lane, United States Department of Agriculture.

Plants for Honey Bees.

The plants that serve as forage for honey bees are: For March, the willows, soft maple, elm, alder and dogtooth violets; for April, the above and the June berry, crimson clover, dandelion, gooseberry, currant, apple, pear, peach, cherry, plum and rhododendron, although some years they may not bloom until May, much depending upon the section and climate. During May those mentioned will be re-enforced by the holly, tulip tree, raspberry, persimmon, grape vine, blackberry, alsike, clover, strawberry and white clover. Along in the summer, beginning the latter part of May and the first part of June, the magnolia, cow pea, catalpa, daisy, alfalfa, milk weed, cucumber, melon, sweet clover, corn, buckwheat and numerous flowers keep up the supply until late in the season.

Remedy for Calf Scours.

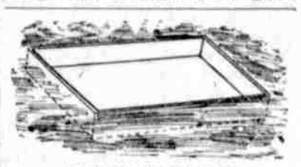
According to experiments made at the Maryland experiment station, formalin can be used to check scouring in calves. The method of using is to mix one-half ounce of formalin with 15 ounces of water for a stock solution. From this stock solution one teaspoonful is added to each pint of milk. Of twelve calves treated in this way, eleven recovered without any further treatment. Further experiments will be conducted to find out whether formalin is injurious to the calves in any way.

Fertilizing Problems.

Without manure or fertilizer there is no farm capable of producing crops year after year, for all soils must be supplied with that which should take the place of the substances removed during the growth of crops. Plants, like animals, have life, are possessed of organs and vessels in which circulates a fluid, and which, aided by an appropriate nourishment, develop an organic mass in a given time. The most fruitful soil will be that which in the same time will have produced the most considerable weight of organic matter reduced to a dry state. All manure put into the earth should be in a state of humus and as soluble in water as possible, so that the plants can seize upon it and appropriate it to themselves. Manure consists of all the elements of vegetable matter. As soon as it is soluble the roots absorb it and communicate it to the interior organs of the plant, which secrete it in the parts in which it has need to develop itself; hence the more a piece of land is mixed with soluble manure, the more it produces plants and vegetable qualifications, only the consumption of the manure is not the same in all. In order to derive crops from the soil, therefore, the weight of the plant foods added to the soil, either in the forms of manure or fertilizer, should be equal to the plant foods of the crop to be obtained; in other terms, when one wishes to obtain from a field which has no trace of manure a production of given weight it is necessary to carry and place in this field other organic matters produced elsewhere and of an equal weight, or the soil will lose in fertility.

The Hogs' Bath Tub.

Dipping hogs is at best nasty work, and by providing a properly constructed bath tub much, if not all, of this work may be avoided, says the Prairie Farmer. Construct a tank of any width and length you please, just so it is large enough, but be careful not to get it



BATH TUB FOR THE HOGS.

more than 15 inches deep. A good size to make is 5 feet wide by 10 feet long and 15 inches deep, using lumber 2 inches thick and 15 inches wide for the sides and ends, and flooring of galvanized iron for the bottom. Set this in the ground under a shed near where the hogs are fed and fill to a depth of about 10 inches with water and on top of this place half an inch of crude oil.

During summer and fall, and even on real warm days in winter, hogs will gladly use this to wallow in if shut away from mudholes, and it is sure death to lice and skin diseases. The advantage of this tub over pouring the crude oil into mudholes as has been suggested, is that it is more economical and is cleaner, besides being more effective.

Pop Corn.

Pop corn is a good crop to grow, especially if the grower is able to keep it a season or two in case of low prices. Only the white varieties are suitable for market, as most of the corn goes into pop-corn balls, and the nearer white the better, colored varieties being sure to spoil the effect and sale of the popped article. In culture some readily-available fertilizer should be planted with the seed, as the young plants are not so sturdy as the sprouts of other corn. A good start does wonders for the corn. Too much hoeing can hardly be given. The drill system is the easiest and most profitable, and three feet between the rows is sufficient. Rice corn, which is the most desirable of any for planting, can stand thirteen to sixteen inches apart in the drill, and do well if the soil is good. Buyers' demands are imperative and must be met. They are that the corn must be at least one year old, to pop well, and entirely free from mold, staining by mice, or mice odors, free from silk and husks, and in every way sweet and bright.

Our Rival to the South.

The Argentine Republic threatens to be a greater rival of the United States than is appreciated by most persons. Because of the location of the country, the climate is a little less subject to great variations than that of the United States, and all crops that can be raised in this country can be grown in the Argentine Republic with much less risk than here. The cereal crops and cattle-raising are very flourishing, and a very promising market is being opened up in Europe.

Water for Fowls.

In the composition of an egg there is a large percentage of water. We often think that hens in winter are not provided with enough pure water. Without water they can no more furnish eggs than without corn or wheat. It behooves, then, to see that the fowls are provided with plenty of fine water, and that it is not in a congealed form, for it is very hard, if not impossible, for a fowl to partake of it when in a solid form.

Bees on the Farm.

Every farmer should have a hive of bees on the farm, even if he attaches but little value to the honey. The bees are excellent foragers and carry pollen from one plant to another. In communities where no bees are kept there will be found orchards that do not bear, the cause being unknown, while a hive or two of bees in the neighborhood would change the conditions.

In feeding sheep for market avoid feeding corn in excess. I think that is one of the great faults of our sheep feeders; they feed too much of the carbonaceous ration. It is perhaps true that one can put a flock of sheep into the barn and make a greater gain per day for a reasonable time with corn than with any other kind of food, but one is not making lean meat, simply mutton tallow. A much better food will be oats, bran, oil cake—something of that kind which will produce a better quality of meat.—F. D. Ward, in Orange Judd Farmer.