

# O. R. & N.

Weekly Excursions TO THE EAST, MODERN UPHOLSTERED TOURIST SLEEPERS

9:30 p. m. Salt Lake, Denver, Ft. Worth, Omaha, Kansas City, St. Louis, Chicago, Portland, Walla Walla, Spokane, Minneapolis, St. Paul, Duluth, Milwaukee, and the East.

8:00 p. m. OCEAN STEAMSHIPS From Portland.

8:00 p. m. COLUMBIA RIVER STEAMERS. To Astoria and Way Landings.

6:00 a. m. WILLAMETTE RIVER Oregon City, Newberg, Salem and Way Landings.

7:00 a. m. WILLAMETTE AND YAMHILL RIVERS. Oregon City, Dayton and Way Landings.

6:00 a. m. WILLAMETTE RIVER Portland to Corvallis and Way Landings.

SSAKA RIVER Riparia to Lewiston

Passengers booked for all Foreign Countries. J. C. HART, Agent, Heppner, W. H. HURLBURT, General Passenger Agent, Portland, Or.

# Denver & Rio Grande RAILROAD

SCENIC LINE OF THE WORLD Weekly Excursions TO THE EAST, MODERN UPHOLSTERED TOURIST SLEEPERS

In through tourist cars without change. In charge of experienced conductors and porters.

Monday, To Kansas City, Chicago, Buffalo and Boston without change via Salt Lake, Missouri Pacific and Chicago and Alton Ry.

Tuesday, To Omaha, Chicago, Buffalo and Boston without change via Salt Lake and Chicago, Rock Island & Pacific Ry.

Wednesday, To St. Joseph, Kansas City and St. Louis without change via Salt Lake and Burlington Route.

Thursday, To Kansas City and St. Louis without change via Salt Lake and Missouri Pacific railway.

A day stop-over arranged at Salt Lake and Denver.

A ride through the Famous Colorado Scenery.

For rates and all information, inquire of O. R. & N. and S. P. agents, or address, R. C. NICHOLS, Gen. Pass. & Trk. Agt., 251 Washington St., Denver, Col.

SPOKANE FALLS & NORTHERN NELSON & FORT SHEPARD

RED MOUNTAIN RAILWAYS The Only All-Rail Route Without Change of Cars Between Spokane, Rosland and Nelson. Also between Nelson and Rosland, daily except Sunday.

Leave Spokane 8:00 A. M. Arrive Rosland 1:40 P. M. Return Spokane 8:45 A. M. Arrive Spokane 3:45 P. M.

Close connections at Nelson with steamers for Kasko, and all Kootenai Lake points.

THROUGH TICKETS TO THE East and Southeast

UNION PACIFIC R. R. THE THROUGH CAR LINE.

PULLMAN PALACE SLEEPERS. PULLMAN TOURIST SLEEPERS. FREE RECLINING CHAIR CARS.

Portland to Eastern Cities Without Change.

Quick Time. Union Pacific. Personally Conducted Excursions. Through Ticket to Destination. In 6 Days. Direct line to Toronto, Mississippi and Interior and Exposition held at Omaha, Nebraska, June 1st to November 1st.

Write undelivered for rates, time tables and other information pertaining to Union Pacific R. R. J. H. LOTHROP, J. C. HART, Agt., Gen. Pass. & Trk. Agt., O. R. & N. Co., Portland, Or.

"The Regulator Line"

The Dalles, Portland & Astoria Navigation Co. "DALLES CITY" AND "REGULATOR"

Commencing Monday, May 2nd, the steamer of the Regulator Line will leave Portland at 6:30 a. m. and the Dalles at 8:30 a. m.

When you go to Portland, stop off at The Dalles and take a trip down the Columbia; you will enjoy it, and save money.

W. C. ALLAWAY, General Agent.

OREGON SHORT LINERY.

QUICKEST AND MOST DIRECT LINE TO UTAH, COLORADO, NEBRASKA, KANSAS, MISSOURI RIVER and all Points EAST and SOUTH-EAST.

LOOK AT THE TIME.

NEW YORK, 4 1/2 days CHICAGO, 3 1/2 " ST. LOUIS, 3 1/2 " OMAHA, 3 " SALT LAKE, 1 1/2 "

Free Reclining Chair Cars Upholstered Tourist Sleeping Cars Pullman Palace Sleeping Cars

For full particulars regarding rates, time of trains, etc., call on or address J. C. HART, Agent, O. R. & N. Co., Heppner, Oregon.

QUICK TIME!

San Francisco

Attention is directed to the fact that the Oregon Short Line Railway is now in operation between Portland and Salt Lake City.

Attention is directed to the fact that the Oregon Short Line Railway is now in operation between Portland and Salt Lake City.

Attention is directed to the fact that the Oregon Short Line Railway is now in operation between Portland and Salt Lake City.

Attention is directed to the fact that the Oregon Short Line Railway is now in operation between Portland and Salt Lake City.

Attention is directed to the fact that the Oregon Short Line Railway is now in operation between Portland and Salt Lake City.

Attention is directed to the fact that the Oregon Short Line Railway is now in operation between Portland and Salt Lake City.

# BUILD NIAGARAGA CANAL

Information Enabling Farmers to Deal With the Subject.

It is but a few years since the nature and possibilities of dealing with alkali soils were a complete mystery to the majority of farmers. The work has been taken up by Professor E. W. Hilgard, of the California State University, who is said to be the leading authority on this subject, and through whose efforts farmers are now able to deal with the subject in an intelligent manner. It is now made known that "alkali" can be got out of all soils by the expenditure of sufficient money, and that the only question is whether it will pay to do it, the fact being that in some cases it will pay and in other cases not. As population increases and markets become better, farmers will be reclaimed which it would not now pay to touch, while some soils can never be profitably redeemed under any conditions of which the present generation have any conception.

The first requisite to intelligent dealing with alkali lands is a clear understanding of the way in which alkali forms, and a recently published paper by Professor John A. Wattson, of the Utah Agricultural College, is exceptionally clear on this point. "Alkali," says Professor Wattson, "is that portion of the soil which is most readily soluble in water." As rains come the alkali is carried down into the soil, only to return again as the water returns by capillary attraction, to the surface, where the alkali is left as a black or white coating, until more rain comes. Under natural conditions the movement of alkali in arid districts is quite small, being confined to that portion of the surface which is penetrated by the light rains of those districts. When water or irrigation is added and the surface flooded to a depth never reached by the rains, the alkali from the lower depths of the soil is brought to the surface and added to that already there, so that land which has previously raised crops will do so no longer. It is generally understood, of course, that alkali seems to be injurious only at or near the surface, where the black alkali (carbonate of soda or washing soda) destroys the humus and corrodes the crowns of the roots just as it will the human hands.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

# HOW ALKALI FORMED.

Information Enabling Farmers to Deal With the Subject.

It is but a few years since the nature and possibilities of dealing with alkali soils were a complete mystery to the majority of farmers. The work has been taken up by Professor E. W. Hilgard, of the California State University, who is said to be the leading authority on this subject, and through whose efforts farmers are now able to deal with the subject in an intelligent manner. It is now made known that "alkali" can be got out of all soils by the expenditure of sufficient money, and that the only question is whether it will pay to do it, the fact being that in some cases it will pay and in other cases not. As population increases and markets become better, farmers will be reclaimed which it would not now pay to touch, while some soils can never be profitably redeemed under any conditions of which the present generation have any conception.

The first requisite to intelligent dealing with alkali lands is a clear understanding of the way in which alkali forms, and a recently published paper by Professor John A. Wattson, of the Utah Agricultural College, is exceptionally clear on this point. "Alkali," says Professor Wattson, "is that portion of the soil which is most readily soluble in water." As rains come the alkali is carried down into the soil, only to return again as the water returns by capillary attraction, to the surface, where the alkali is left as a black or white coating, until more rain comes. Under natural conditions the movement of alkali in arid districts is quite small, being confined to that portion of the surface which is penetrated by the light rains of those districts. When water or irrigation is added and the surface flooded to a depth never reached by the rains, the alkali from the lower depths of the soil is brought to the surface and added to that already there, so that land which has previously raised crops will do so no longer. It is generally understood, of course, that alkali seems to be injurious only at or near the surface, where the black alkali (carbonate of soda or washing soda) destroys the humus and corrodes the crowns of the roots just as it will the human hands.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

When this condition has been brought about the only remedy is drainage, which, however, is a complete remedy if thorough and continued until the alkali has been leached out of the soil. It "sinks" having no drainage, and where ditches or tunnels would be too costly, it is easy, as an engineering problem, to sink pits to receive the drainage water and pump out and evaporate the salts, which in some cases might have a commercial value. There can be no doubt that in coming years it will gradually become profitable to reclaim alkali tracts in this way. Whether it will pay now, in any case, would depend upon the cost of drainage and pumping, and the amount of water available for leaching. In most cases, doubtless, it would not pay at present, but wherever an outlet for natural drainage can be made at moderate expense and there is water available, it is profitable to reclaim land now, since alkaline soils, as a rule, are very rich soils, and produce abundantly when reclaimed.

# CONTROL OF NEXT SENATE.

Slight Gains on Either Side Will Change Its Composition.

Associated Press Dispatch. WASHINGTON, Nov. 6.—The control of the United States senate will be determined very largely by the result of the elections next Tuesday when 23 state elect legislatures which will in turn elect senators. The present party strength in the senate is as follows: Republicans 48, democrats 34, populists 6, silver republicans 6. This gives a majority to no one party and it has been proven a fruitful source of doubt in legislative legislation by party lines. The terms of 30 of the present senators are about to expire and in most of these cases the legislators chosen next Tuesday will elect successors. In seven cases, however, legislators have already been chosen and senators elected, viz: Al Ditch of Rhode Island, Daniel of Virginia, McComas of Connecticut, Gorman of Maryland, Hanna of Ohio, Money of Mississippi. In seven cases, however, legislators have already been chosen and senators elected, viz: Al Ditch of Rhode Island, Daniel of Virginia, McComas of Connecticut, Gorman of Maryland, Hanna of Ohio, Money of Mississippi.

The remaining 23 senators are yet to be chosen. Those who are about to retire: Allen, populist, of Nebraska; Bate, democrat, of Tennessee; Burrows, republican, of Michigan; Cannon, silver republican, of Utah; Clarke, republican, of Wyoming; Cochrill, democrat, of Missouri; Davis, republican, of Minnesota; Faulkner, democrat, of West Virginia; Gray, democrat, of Delaware; Lodge, republican, of Massachusetts; Mantle, silver republican, of Montana; Mills, dem., of Texas, Mitchell, democrat, of Wisconsin; Murphy, democrat, of New York; Pasco, democrat, of Florida; Quay, republican, of Pennsylvania; Rodes, democrat, of North Dakota; Smith, democrat, of New Jersey; Stewart, silver republican, of Nevada; Turpie, democrat, of Indiana; White, democrat, of California; and Willson, republican, of Washington. Several of these cases the election of present incumbents is expected but in quite a large number of them doubt exists.

The republican managers are placing reliance on the fact that they need only a few votes to secure them a clear majority, while the democrats, populists and silver republicans would have to carry most of the doubtful legislatures in order to prevent a republican majority. The states considered most in doubt are West Virginia, New York, Pennsylvania, North Dakota, New Jersey, Indiana, California, Washington and Nebraska; conflicting claims being made in each state. Among senators officials the opinion prevails that the anomalous condition now prevailing of a senate without a majority, will end with the coming election, and that the legislative branch will acquire assurance of majority rule in the upper branch of congress after March 4th next.

RETURNED FROM ALASKA. Leslie Matlock and Miller Vaughan returned from the land of gold. East Oregonian, Nov. 5th. Leslie Matlock is in the city visiting his sisters, Mrs. E. W. Ayers, Jr., and Mrs. E. A. Vaughan, and has been in Skagway, Alaska, during the past year, corroborating the reports of the richness of the Altin like placer mines, he says: "I know positively that the Lake Atlin district comprises some very rich ground, and have seen the gold brought out by the miners. Altin will be reached from Skagway by dog-team in three days, and some claim they can make the trip on winter trails in two days. I look for some strikes next spring exceeding any yet reported.

"At the present time, Skagway has several thousand population. The railroad company has 1000 men at work on construction, and already two trains a day are running from Skagway to the southern end of White Pass. Beyond the road is graded five miles, and work goes steadily on. The railroad company carries freight for 15 cents a pound to Bennett. At the end of the road now built, the company sublets the carrying to others.

"Just before I came away, about a month ago, 50 kaes down freight cars and several passenger cars were received by steamer by the railroad company. "I was also informed that the company has intention of continuing on into the Yukon valley, and it is generally thought the road will be built as far as Fort Selkirk.