COURSE IN PHOTOGRAPHY FOR AMATEURS

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THE OREGONIAN'S HOME STUDY CIRCLE: DIRECTED BY PROF. SEYMOUR EATON

XI.—IMPROVEMENT OF NEGATIVES.

BY F. DUNDAS TODD.

What is a perfect negative? It is exceedingly difficult to give a good definition, but this may do as well as any. A negative is perfect when it gives the exact kind of print the photographer wants. Some men want all their pictures to be clear, crisp and full of detail, no matter what the state of the atmosphere at the moment of exposure, while others endeavor to get gray, smudgy effects under exactly similar conditions. A perfect negative in one man's hands would be a failure in those of another.

But another point to be considered is the printing of the picture. Photographers have much choice as to the printing medium, but unfortunately the same negative will not give equally good prints with all kinds of papers. Glossy papers tend to give contrasting effects, therefore the negatives for such paper must incline to flatness. Matt papers, all "gaslight" printing papers, such as Velox, Dekko, Vinco, etc., and platinotype papers, on the other hand, require contrasty negatives as they tend to flatness. So, during development we must always keep the printing process in mind if we hope to get a negative that will approach perfection.

At this point it may be necessary to define a few common terms so that there may be no misunderstanding as to my meaning. A "contrasty" or "vigorous" negative is one where there is a very decided deposit of silver on the high lights or white objects, and a very thin deposit in the shadows. If the contrast be excessive, the print will show lack of detail in the high lights when the shadows are sufficiently printed, or if the high lights are long in printing the shadow detail will be lost by overprinting. A "flat" negative is the very reverse of a "vigorous" one. Such a negative will have a liberal deposit of silver all over, the result being a flat, insipid print. A "dense" negative is one that has a liberal deposit of silver, and is easily known by the fact that it takes a very long time to print. A "thin" negative is the opposite, and prints too quickly.

But we may have a combination of these characteristics, and we must be able to recognize them all in order to modify them judiciously. In short, we must recognize the cause.

Underexposure will give contrast, but so will overdevelopment. Overexposure tends to flatness, but so does underdevelopment. We may overdevelop an underexposed plate and underdevelop an overexposed plate, and thus make matters worse. We may have a very dense negative that takes a long time to print, and yet it may give an excellent print, because we partly corrected overexposure by overdevelopment. But a dense negative that gives a "contrasty" print indicates a correct exposure ruined by overdevelopment.

Suppose we take a batch of negatives that are not giving satisfactory prints and see if we cannot locate the trouble. It might be wise to have a print beside us for reference, as it will likely be a great help. Our first negative gives us nice detail in the shadows, but the high lights on the print are simply masses of white. That is, the print is too "contrasty." Let us now examine the negative, by holding it up to the sky or in front of a sheet of white tissue paper behind which is a lamp or gas flame. Look carefully at the high lights and see if there be detail present, and if so does it look as if it ought to show in the print, or is it lost in the mass of deposit? If it seems as if it ought to print and glossy paper has been used, very likely a print on matt, platinotype or a "gaslight" paper would be all that could be desired. But if the detail be choked up or a print on the papers just mentioned be unsatisfactory, then the contrast is due to overdevelopment, and we must undo part of that by the process known as "reduction." This is described later on.

But the negative may be one that at no stage shows detail in the shadows, yet one which takes a long time to print the high-light detail. An examination of the negative will show detail to be absent in the shadows. Here we have underexposure combined with overdevelopment. The only real remedy for this kind of negative is a hammer, applied very indiscriminately. Or the negative takes a long time to print, but the resulting picture is fair, or just a trifle contrasty. This indicates full exposure and overdevelopment. Reduction will improve this kind of negative wonderfully.

Or the negative may take a long time to print, yet the pictures turn out flat and lifeless. This is a case of gross overexposure combined with overdevelopment, a not uncommon complaint. Reduction will improve such a negative, and in a very bad case we may carry the process sufficiently far to get rid of some of the shadow detail, and then recover contrast by intensifying what is left.

The negative may print quickly, giving plenty of detail everywhere, and yet the picture be flat. This indicates underdevelopment, and the remedy is intensification. We may have overexposure combined with underdevelopment, and in this case it is wise to get rid of some of the shadow detail by reduction before proceeding to intensify.

It is now time to describe how to conduct the operations of reduction and intensification. They are even simpler than development, so there is no reason why any amateur cannot handle them successfully.

Reduction is usually accomplished by means of potassium ferrocyanide, commonly called red prussiate of potash. Remember, please, that it is a rank poison. To use it take a crystal about double the size of a pea and dissolve it in about two ounces of cold water. Then make up an ordinary hypo fixing bath and add to it enough of the ferrocyanide solution to make it a slight straw color. Immerse the negative, previously soaked in water for about a quarter of an hour, in this, and it will rapidly lose density. The progress may be watched by holding the negative occasionally against the sky or the white tissue paper heretofore described. When sufficiently reduced, the negative should be as thoroughly washed as after an ordinary fixing bath. One point needs special notice. Daylight decomposes a solution of ferrocyanide very rapidly, and therefore the tray should not be placed in front of a window. Whenever the solution turns green it is useless. Should reduction appear to stop, add more of the ferrocyanide solution, of course removing the negative first from the bath and seeing that the latter is well mixed before the negative is returned.

There are dozens of ways by which the process of intensification can be performed, but for the average individual I consider a one-solution intensifier the best. It is a little more troublesome to prepare, but it is exceedingly simple to use, and, above all, one can see just what is going on, and can therefore tell when density is sufficient. The following are the details of the process:

Prepare a saturated solution of bichloride of mercury in water—that is, dissolve as much of the bichloride as the water will take up. This can be done by placing an ounce of the chemical in a 12 or 16-ounce bottle and filling it with water. An occasional shake will help solution, which proceeds very slowly. The bottle should be marked "poison." Then dissolve 1½ ounces of iodide of potassium in six ounces of water. The first solution should be poured into the iodide a little at a time. A red precipitate will at once form, which will dissolve on shaking the bottle. A point will be reached when the forming red precipitate will no longer dissolve by shaking, and when that happens no more of the mercury must be poured in. Be careful not to add more than will be just enough to make the solution very slightly turbid. Now add one ounce of hyposulphite of soda, and when this has dissolved add enough water to the solution to make the total bulk 20 ounces. For use, this should be diluted with about three parts of water. If the plate has not been thoroughly fixed the intensifying solution will produce yellow stains. The negative to be intensified should be soaked in clean water for about half an hour, and then immersed in the intensifier. It will rapidly become denser, and the progress can be watched by holding it up and examining it with the sky for a background. When dense enough the negative should be washed and set aside to dry. Should the intensification be overdone, it can be reduced by placing the negative in the fixing bath for a short time.

Another very excellent single solution intensifier is the platinum intensifier, which is manufactured by a Philadelphia house. Full instructions accompany the bottle, and the process is an exceedingly simple one.

Local reduction and local intensification may often be done with advantage. The negative is placed in a horizontal position about a foot above a table, on which is laid a sheet of white paper to reflect the light upward. The solution is applied to the necessary spot by means of a small brush. To prevent spreading, it is thickened by the addition of a little ordinary gum.

Local reduction may also be done by taking a small piece of canton flannel or cotton wool, dipping it in alcohol and rubbing the spot gently. This abrades the film and in point of fact is exactly similar to sandpapering a piece of wood.

Among minor troubles may be included small, transparent spots, which show very distinctly on the prints as small black specks. They are caused by particles of dust on the film at the moment of exposure or by airbeds on the film during development. The remedy is to spot each hole with opaque water-color, applied with the point of a fine brush or the point of a toothpick chewed soft and brush-like.

The film sometimes feels rough after it is dry. This is due to the presence of sand in the washing water. It can be avoided by holding the plate under the tap after washing is finished, and going over the film with a wad of cotton wool or the palm of the hand.

F. Dundas Todd

Note—Four very attractive illustrated studies will follow. The topics are: "The Composition of a Picture," "Portraiture at Home," "Photographing Interiors," and "Landscape Photography."

OREGON HORTICULTURE.

Annual Report of the Retiring President, H. B. Miller.

SALEM, April 12.—The annual report of H. B. Miller, as president of the State Board of Horticulture, was filed in the Governor's office today. It is as follows:

General Conditions.

"This state contains many hundred old orchards, mostly small home places, the fruit from which has been used for home consumption and local markets. Since pests and diseases have been increasing, these orchards have been neglected, and as the soil is being drained of its fertility most of the old places have become little else than breeding places for insects and fungi, that endanger any commercial or well-kept orchard in their vicinity. The fruit from most of these unkept trees is of little value even for home consumption, excepting cherries, and where these old trees have been found infected, in proximity to clean orchards, the commissioners have enforced the law, and had them cleaned or taken out entirely.

"From now on a more vigorous policy must be pursued, and all unkept places must be trimmed and kept clean, or taken out entirely.

"Several nurseries were in bad condition, being infected with canker, scale and aphis. Some have been condemned and cleaned by burning, and all diseased places have been cleansed and put in good shape, and others have cleaned up and retired from the business.

"The low price at which nursery stock had been selling made the business unprofitable and more than half the people engaged in this work have retired during the past few years.

"The past year has seen a very healthy revival of the nursery business, and good, clean stock, up to date in varieties, has been in good demand, at fair prices. Washington, Idaho, Montana and California have been buying largely of Oregon nurserymen during the past year, and some shipments have been made to the Orient.

Apple Canker.

"The worst difficulty found with nursery stock was that much of it was infested with canker, without the knowledge of the nurseryman. By tracing up the disease found in many young orchards, it was discovered that many young apple trees had become infested while in the nursery, sometimes coming from cuttings, but generally from cankered trees in the vicinity of the nursery. As the spores are blown about, and can be carried as far as half a mile, and perhaps more, it is of the utmost importance that all old trees near to nurseries should be carefully sprayed and the disease killed.

"This disease has been widely distributed throughout the state, and in all parts of Western Oregon its growth is so rapid as to endanger the success of apple growing. It seems to thrive equally well in all parts of Western Oregon. In Eastern Oregon, in the drier regions, it does not seem to be so injurious; but as it is found doing well in the vicinity of the timber line of Eastern Washington, there is danger of its extending over Eastern Oregon.

"Professor A. B. Cordley, of the Oregon Experiment Station, has been doing some valuable work for the state in connection with this pest, and in his further researches will no doubt find an efficient method of mastering it. For the present, the most important work is to keep it out of the nursery stock.

San Jose Scale.

"This insect is to be found now in almost every orchard section of this state, and in many places is doing serious damage, having in some places entirely ruined good orchards in two years from its first appearance.

"It is to be found generally in most of the towns, where it attacks not only fruit trees and berry bushes, but ornamental trees and shrubbery as well.

"Much good has been done by the Commissioners this year in enforcing regulations in regard to spraying in the dooryards of the principal cities and towns. A continued and more rigid enforcement of these regulations will no doubt be necessary in the future.

"Recent reports from Jackson County report that some enemy of the scale is destroying it in that section, and orchardists are encouraged with the hope that this pest may be held in check.

"The most successful method of combatting insects is by the introduction of efficient enemies, and much good work might be done in this way if funds were provided for the purpose.

"The attention of the State Entomologist, Professor A. B. Cordley, has been called to this condition of destruction going on in Jackson County amongst the scale, in the hope that if the enemy is discovered, it may be introduced into other portions of the state where the scale is doing its deadly work.

Condemnation of Fruit.

"Scale, scab and codlin moth have become so common in most parts of the state that clean fruit can no longer be grown without proper spraying. During the past year fruit was so scarce that a thorough execution of the law regarding selling diseased fruit for home use would have prevented many people from getting any fruit for family use; and for that reason the law was not strictly enforced, excepting with scaly fruit. It was the intention of the board during the coming year to enforce the law in every respect regarding wormy and diseased fruit, and growers bringing this kind of product to the market will find it condemned and destroyed.

"In this connection I wish to report that good success in keeping the codlin moth in check has been achieved in many large commercial orchards, where not to exceed 5 per cent of the fruit has been damaged. It has been accomplished, however, by the closest attention as to time, method and thoroughness of spraying, usually five sprayings being required.

"Success in this work is only to be secured by the most minute thoroughness in the application of the spray, and a certainty of the purity of the material used. Hundreds of failure in spraying are reported to the board, but in every case examined the cause was found either in impure materials, not a sufficient number of applications, or general carelessness in methods of application.

"Inasmuch as diseased and wormy fruit will not be allowed sold, even in local markets, it is quite important that growers should understand this, and be governed accordingly. The board has, therefore, constantly notified the public through the press of its intention to strictly enforce every feature of the law regarding the selling of fruit.

"It is very gratifying to learn, from the reports of the various Commissioners and quarantine officer of the port, that the dealers in fruit are heartily in accord with the law which prohibits the sale of all infected, wormy or diseased fruit, and will give every assistance in carrying out the provisions of this law.

"And in this connection I would suggest that the fruitgrowers of this state urge upon the Legislature the necessity for a small appropriation for the importation of beneficial insects, the value of which cannot be overestimated. Our neighboring state, to the south, has expended thousands of dollars in this line, with most beneficial results, and we could easily profit by this experience.

"The board has earnestly endeavored to enforce the law regarding the sale of impure and adulterated materials for sprays. So far there has not been much good accomplished because of carelessness on the part of growers. Law cannot be made effective to protect people who do not want protection, and until those who use this material feel the necessity for the execution of the law, the work of the board will not be successful in that direction.

"A great many of the disappointments in spraying come from adulterated materials. This is especially true of paris green and blue vitriol, and every orchardist should be sure that he is not being defrauded in these poisons.

"The work of the board for the year has not been as effective as a whole as I had hoped. The individual work of the Commissioners has been earnest and faithful, and the improved condition of horticulture in the state is due to the generous work and real sacrifices of the members of the board. Each member is an enthusiastic fruitgrower, well qualified by knowledge and inclination for the position, and I am sure that no better work could be done by any other body of men with an equal amount of money at their command.

"The work of the secretary, Mr. H. E. Dosch, has been painstaking, efficient and effective, and his generous services for the public in this position are deserving of the highest commendation.

"The active interest in the work of the board by all persons connected with it indicates that valuable services are being performed. The vast amount of inquiry coming to all the Commissioners from all sections of the state, the renewed and continued interest in the board's activities by the fruitgrowers, gives assurance of value in the law and general support in its execution.

"The appointment of so earnest, capable and extensive a fruitgrower as Hon. E. L. Smith as my successor gives assurance of continued and more effectiveness of the work."

BIG MINING CORPORATION.

Capitalized at $30,000,000, and Will Operate in British Columbia.

SPOKANE, Wash., April 12.—The Chronicle this afternoon announced the formation of the biggest mining company operating in the Northwest, and one of the most gigantic mining schemes ever formed. It is the King Solomon Mining Company, headed by James B. Townsend, of Lima, O., receiver of the Detroit & Lima railroad. It has been capitalized at $30,000,000, and has secured hundreds of claims for two and a half miles along Lake Kootenay, near Ainsworth, B. C., including the town of Woodbury, and all the property formerly owned by the Canadian Pacific Mining & Milling Company. Work will commence on the mining property in May. Half a million dollars will be expended this season. Improvements will include the establishment of a smelter, chemical works and a complete system of power drills. A mammoth water-power plant will be constructed, that will furnish power for the entire district. The transfer of stock from the old Canadian Pacific Mining & Milling Company to the new King Solomon Mining Company is now in progress. The stockholders include men worth millions in New York.

RESCINDED RECENT RULES.

Southern Pacific Drops Employes' Insurance and Age Limit.

The Southern Pacific Company has rescinded its rules in regard to insuring its employes, and of men making application for work in Portland. The reason given is that the new regulations caused a good deal of dissatisfaction among the engineers, firemen and mechanics, and that a good many desirable men had been barred out by the 45-year limit. The rules were in force just one month, but even those who signed the applications have been released, and all deductions for pay in connection with the insurance are to be refunded.

Quite a number of old men who are known to be good workers were refused employment under the workings of the system, but these will now be taken on, much to their satisfaction. The way some of these old fellows "kicked" was quite amusing, and a number of them called on a down-town agent in a body and offered to meet a like number of young men between 25 and 35 years of age, on a given piece of railroad grading. This brought out the statement on the part of a well-known contractor that he would rather have a gang of old men than one composed of young ones. Quite a number of hands are needed by the Southern Pacific on its various lines and branches in Oregon.

Logger Injured.

William Craswell, who worked in the timber for Proctor & Beer's sawmill, at Pleasant Home, yesterday met with a severe accident, and was brought to the city for treatment. He was handling logs and using an ax. The ax glanced, striking him on the front part of his left leg, between the ankle and knee, cutting into the bone and severing the muscles of the leg. He was taken to Grsham first, but the physicians there advised that he be brought to Portland.

Frost Hurt Early Prunes.

HILLSBORO, Or., April 12.—Orchardists in many localities report that the prunes have been very much injured by the recent frosts. The blossoms are falling in exposed places, and the early bearing trees will afford but a slight yield. Apples do not appear to be injured.

EUROPEAN FLOUR CARGOES

BERWICKSHIRE CARRIES THE FIFTH FOR THE SEASON.

Three Others Have Sailed for the Cape—Scarcity of Sailors—Marine Notes.

The first flour cargo which has left Portland for Europe this year was cleared at the custom-house yesterday by the Portland Flouring Mills Company for Queenstown or Falmouth for orders. The vessel carrying it was the smallest craft that has figured with the 1899-1900 grain fleet. It was the diminutive Berwickshire, and she has aboard 16,422½ barrels, valued at $42,500. While this is the first European flour cargo of the year, there have been four others since the opening of the season last July, the other vessels clearing with flour cargoes being the Forfarshire and the Arctic Stream, in November, with 22,858 and 27,214 barrels, respectively, and the Alcinous and Kirkcudbrightshire, in December, with 27,230 and 26,436 barrels.

In addition to these cargoes, the Powys Castle and the Lorton each carried full cargoes of flour to South Africa, and the Macduff carried a part cargo for the same port. The demands of the Orient have grown to such proportions that the mills in the Northwest are kept pretty busy grinding cargoes for that country, so there is but little flour to be shipped around the Horn to Europe.

WHY SAILORS DESERT.

All Work and No Play Offers Some Excuse.

The William Law, Thornlibank and Berwickshire are still in the stream waiting for sailors. The Law has the nearest to a full crew, lacking but one man. With a scarcity of labor on shore in a glorious country like Oregon, it is but natural that Jack Tar should find shore life more attractive than that on the rolling deep. The treatment which is accorded some of the men before the mast, however, is not calculated to render their ship life any more attractive than it should be. Last Sunday, while crowds of people were out enjoying the bright sunshine and making the most of the day of rest, the second mate and apprentice boys on one of the ships in port were kept at work all day. While they were busily engaged in painting, chipping rust, etc., a delegation of apprentice boys from some of the other ships in port lined up on the dock above them and sang, "Rule, Britannia! Britons never will be slaves!" The hard-worked sailors saw the point of the joke, but did not appreciate it, and the general opinion of the outside public was to the effect that if the mistreated sailors did not run away from their ship they were hardly worthy of the flag they were sailing under.

The theoretical but impracticable plans for handling the sailor question which are evolved by well-meaning people generally provide for the sailor going up to the Consul's office and shipping himself. The boarding-house men of this city have a reputation as hustlers in their peculiar line, which is not limited to this state or coast, and when their most strenuous efforts fail to secure crews promptly, the delay due to waiting for the sailor to come around himself and be shipped would be too great to be considered.

ON A TRIAL TRIP.

D. P. & A. N. Co.'s New Steamer Reliance on Her First Run.

The new steamer Reliance, owned by The Dalles, Portland & Astoria Navigation Company, started out on her trial trip yesterday morning from Supple's shipyard, on the East Side. Captain Johnson was in command; A. Andrews was engineer. The company was represented by Hugh Glenn, president, and W. C. Allaway, manager. Others aboard were: J. T. Peters, E. M. Williams, L. E. Crowe, S. L. Brooks, J. P. McInerny, John Fleming, Joseph Supple (builder), Thomas F. Strong and F. J. Smith. It was the intention to make the run to Kalama and return, but when near St. Johns the high-pressure engine was disabled, and it was necessary to return to Portland. The cylinders were disconnected and the boat brought back with one cylinder. The steamer, while running to St. Johns, made excellent speed. The machinery was working smoothly, and a successful trip was in prospect when the slight accident happened. Another trial trip will be undertaken today. The steamer will leave at 10 o'clock this morning.

To Launch the Kvichak.

The fine freight steamer Kvichak, built by the Wolff & Zwicker iron works for the Alaska Commercial Company, will be launched from the ways at the shipyard Saturday afternoon at 2 o'clock. She will be the largest vessel ever launched in Portland, and it is expected that a large crowd will witness her plunge into the river. It will be impossible to admit the public to the shipyard, but a fine view of the launching may be had from East Water street, which is large enough to hold half the population of Portland.

Monmouthshire's Quick Trip.

The Oriental liner Monmouthshire made a good beginning for her first voyage under her new master. She left Portland about 5 o'clock yesterday morning, and at 12:15 anchored at Astoria. She is having very good dispatch this trip. After being delayed at quarantine she came to Portland and discharged an unusually large inward freight, loaded outward, and was back to Astoria just eight days after entering the river.

Steamer Laguna Ashore.

TILLAMOOK, Or., April 11.—The steamer Laguna, from San Francisco, went ashore this morning north of Tillamook bar, not far from where the lumber schooner Lila and Mattie now lies wrecked. It is expected that the Laguna will come off at high tide this evening, although some fear that she will not be able to get off without assistance.

The Aspice Released.

ASTORIA, April 12.—The British ship Aspice, that arrived in port on Monday from Honolulu, was released from quarantine this morning, and will leave up the river as soon as a tug shall arrive for her. There is no sickness on board of her, nor has there been since she left Honolulu.

Marine Notes.

The steamship Belgian King sailed from San Francisco for Portland Wednesday evening, and is due tomorrow.

Superintendent Conway, of the O. R. & N. water lines, is at Riparia looking after the interests of the river fleet which has headquarters at that point.

The steamer Ocklahama left down last evening, and will start back from Astoria this morning with the British ship Aspice, which has been released from quarantine.

The May Flint, which lost a good grain charter by late arrival, and then took a cargo of coal to San Francisco, is reported to be under charter for two more trips in the coast coal trade.

The steamship Duke of Fife, which sailed from the Sound for the Orient last week, carried a cargo of flour that would have done credit to Portland. The total amount for the different ports was 35,881 barrels.

Domestic and Foreign Ports.

ASTORIA, April 12.—Sailed—British ships Poseidon and Isle of Arran, for Queenstown or Falmouth for orders; United States steamer Manzanita, for Coos Bay. Arrived down—Steamer Monmouthshire. Outside at 5 P. M.—Square-rigger in ballast. Condition of the bar at 5 P. M., smooth; weather, clear; wind, south.

San Pedro, April 12.—Sailed—Schooner Fannie Adele, for Gray's Harbor.

New York, April 12.—Arrived—Werra, from Genoa; Lahn, from Bremen and Southampton.

Naples, April 12.—Arrived—Aller, from New York for Genoa.

Liverpool, April 12.—Arrived—Corinthian, from Boston; Belgenland, from Philadelphia.

Yokohama—Sailed April 11—Olympia, from Hong Kong for Tacoma.

San Diego—Arrived April 10—British steamer Robert Adamson, from Nanaimo.

Runcorn—Arrived April 10—British ship Comliebank, from Oregon.

Yokohama—Sailed April 8—British ship St. Mirren, for Oregon.

Antwerp—Arrived April 10—British ship Manchester, from Tacoma.

San Francisco, April 12.—Arrived—Steamer Queen, from Victoria. Sailed—Steamer Reporter, for Cook Inlet.

Queenstown, April 12.—Sailed—Teutonic, from Liverpool, for New York.

Liverpool, April 12.—Sailed—New England, for Boston; Tauric, for New York.

Hoquiam—Arrived April 11—Schooner La Gironde, from San Pedro for Hoquiam.

New York, April 12.—Sailed—Hispania, for Marseilles; L'Aquitain, for Havre; Kaiser Friederick, for Hamburg.

Spoken.

April 5, 26:20 north, 23 west, British ship Ben Lee, from Shields for Santa Rosalia. April 7, 26:21 north, 23 west, British ship Deccan, from Hamburg for Oregon. February 27, 1 south, 28 west, British ship Port Caledonia, from Hamburg for Santa Rosalia.

CHANGED OLYMPIC RESERVE

The Lands Excluded—Proclamation Ready for the President.

WASHINGTON, April 7.—The townships and sections that are included in the exclusions from the Olympic forest reserve, in Clallam County, in the State of Washington, are as follows:

T. 28, R. 13, 14 and 15 W.; sections 1 to 18 inclusive. T. 29, R. 3 W.; sections 1 to 18 inclusive. T. 29, R. 4; sections 1 to 18 inclusive. T. 29, R. 5; sections 4, 5, 6, 7 and 8. T. 29, R. 12; all of T. 29, R. 13, except sections 13, 23, 24, 25 and 26; all of T. 29, R. 14 and 15; sections 1 to 12 inclusive. T. 30, R. 9; sections, 27, 28, 29, 30, 31, 32, 33 and 34, of T. 30, R. 10 W.; sections 25 to 36 inclusive of T. 30, R. 11; sections 17 to 36 inclusive, of T. 30, R. 12; T. 30, R. 13, 14 and 15.

The proclamation excluding these lands, aggregating a grand total of 297,000 acres, has not yet been signed, although it has been prepared. Action as regards Clallam County is being delayed by the failure of the Department to act in Jefferson County. When further reports are received from Jefferson County the proclamation will be signed.

Of the 297,000 acres excluded from the reserve in Clallam County, 47,428 acres are state and school land, 53,120 are homestead entries not yet proved up, 88,759 acres are lands on which final rights or patents have issued, making a total of 189,308 acres.

While settlers inside the reserve were isolated by the forest reserve blanket they had the right to select lands elsewhere, but were not allowed payment for improvements. To remedy this defect, Congressman Jones has introduced a bill to compensate settlers for improvements in cases where their lands are not removed from the reserve.

From the first Senator Foster has urged upon the Interior Department the question of the right of Congress practically to confiscate vested property rights by isolating a settler inside a forest reserve without offering any compensation for such practical confiscation. Indeed, it has been held, at times, that such isolation and confiscation of property was unconstitutional. Primarily it was argued here two years ago, when the law was enacted, granting lieu lands for lands isolated inside of a forest reserve, that the settler was the man to be benefited.

ANOTHER TALK ON BIRDS.

Dr. W. R. Lord Making Himself Popular With School Children.

Rev. William R. Lord addressed the pupils of the Brooklyn School yesterday afternoon on "Birds." The school was separated into two divisions, primary and grammar, and Mr. Lord first gave a half-hour talk to the smaller pupils, after which he spoke more extensively to the pupils of the grammar grades. He has the rare quality of being able to talk interestingly to children, and this was evinced by the rapt attention accorded him throughout his clever talk. In speaking to the younger pupils he called attention to the different varieties of birds in the vicinity of that schoolhouse, and told them personally to observe the appearance and habits of the birds. Questions were then asked concerning these birds, showing that his previous talk had an effect, as many of the children were acquainted with some of the birds mentioned.

To the advanced pupils, Mr. Lord said that the moment they became interested enough in birds to watch and study them they would become their friends, and then he mentioned some varieties rarely seen here. The call of these birds he imitated in a peculiarly natural manner. He closed with a story of an unusual friendship existing between a Portland woman and a cherry bird. The woman, he said, began by throwing out crumbs to the tiny creature, and gradually it became so tame that it would eat out of her hand. Now when she sits at work at her sewing machine this sociable little fellow comes, accompanied by many of his friends, and sits on the machine, talking to the kind woman in his twittering bird-tongue. Mr. Lord then gave a description of these birds, which are supposed to be harmful to the cherry trees, saying that they did little harm to the trees and lived mostly on worms. In the bird world, he said, in closing, the men dressed much better than the women, and this was especially the case with these birds.

These exercises were in place of the usual Arbor Day programme, and, the teachers think, will be productive of good in teaching the children kindness to all creatures.

East Side Notes.

Sam Penny, who has been driver of Engine Company No. 7 for the past two years, has tendered his resignation to Chief Campbell. One of the extramen was detailed to take his place.

J. D. Lee, Superintendent of the State Penitentiary, will retain his residence in the Ninth Ward, where he lived before he moved to Salem. He came down to register from that ward, and was over to see his old friends.

General Summers Camp, of Albina, is arranging for a smoker next Monday night at its quarters in the Manley building. It is expected that delegates from all the other camps of the city will be present at this gathering, and a good time is expected.

James Partlow, who lives on East Twelfth street, says that he has found a way to keep slugs away from plants. He puts cabbage leaves around the plant, and then the slugs leave the plants alone. The remedy is simple enough and costs practically nothing, so that those having plants may try the remedy.

Expensive Telegraph Tolls.

Ainslee's Magazine.

Telegraphing to distant parts of the world is still an expensive business. The rate per word for a message from San Francisco to Auckland, New Zealand, for example, is $2 87. From New York to Manila the rate is $2 45. The charge is not always in ratio to the distance. The rate from New York to some South American or West Indian ports is nearly $2 per word, but in reaching these points the messages travel twice across the Atlantic.

HARDWOODS OF OREGON

MANY USES TO WHICH THEY MAY BE PUT.

Oak Makes Fine Furniture Timber—Wood That Is Good for Barrels and Farm Implements.

Oregon white oak timber has come to the front of recent years as material for the construction of the better class of furniture, and the firms making use of it in Portland consider it superior to the Eastern article, both in beauty and durability. When the same pains are taken in its seasoning and finish, it takes on a gloss fully equal to the best of the Eastern hard woods. Bedroom sets, chiffoniers, office desks, picture frames, etc., are now made of Oregon oak in the furniture factories of Portland, and are often given preference over the fancy grades of imported woods.

The oak of the Pacific Slope does not grow so tall nor so straight as that of the Southern States, and so cannot be used extensively in the manufacture of large barrel staves, though beer kegs are often made of it, as oak logs of the length required may be found, from which the staves can be split. The most use which coopers make of Oregon oak is that of barrel hoops, which are formed of the younger growth of oak saplings. These hoops are used in the manufacture of hogsheads, where stout bands are necessary to protect the iron hoops from violent contact in shipment by rail or by sea. Salmon barrels and barrels enclosing horse meat are often encircled with oak hoops, in addition to the iron ones, which keep the staves together more rigidly, though incapable of standing the jar of heavy bodies in transit.

Furniture dealers who use Oregon oak largely, usually subject the logs to about six months' open-air seasoning after the trees are cut down; then the timbers are squared and placed in the dryhouse, where a thorough artificial seasoning renders the wood proof against further shrinkage after it has been made into modern furniture.

"The quarter-sawn oak is the prettiest timber used in the manufacture of furniture," a prominent furniture man said yesterday. "By quarter-sawn is meant the process of sawing the logs into quarters, as you would quarter an apple, and then the boards are sawn from these divisions. The fine grain of the wood is thus brought out, as in that extension table," and, sure enough, nothing in the black walnut or even the old-style mahogany could be prettier. The table was of elegant manufacture, and might have passed for the output of the best Eastern factories if he had said so.

A great deal of the Oregon oak has been ruthlessly destroyed for fuel within the past half century, but the supply is by no means exhausted, according to a man interested in bringing oak logs to Portland. He says there is no particular belt of oak timber in any section, but that the trees are scattered with a lavish hand all over the country west of the Cascade Mountains. The valley bottoms and the low foothills yet bear an abundance of oak timber, and the fact that it is worth $20 to $22 per 1000 in Portland has rather interfered with its further use as fuel. Most of the oak now used for firewood is of second growth, and comes in the form of saplings, which have sprung up in the rich bottoms within the past 40 or 50 years. The removal of these saplings serve a double purpose of clearing the lands and of enabling farm hands to earn their wages in rainy season, when woodcutting is the only outdoor business that can be followed. Among the other uses for Oregon oak, ship's knees are mentioned, and many of these find their way to Portland shipyards in the course of a year. Ax-handles, whiffle-trees, ploughbeams, wagon-tongues, etc., are often made of native oak, but its use has not yet become general.

Ash and maple are Oregon hardwoods used in the manufacture of furniture, and the demand for these woods grows from year to year. The supply is considered abundant for a long time to come, although furniture factories which use native hardwoods exclusively are constantly increasing in number.

Local coopers use fir and spruce in lieu of oak in the manufacture of the larger barrels. The fir is drawn on for packing fish, and other products whose flavor is not affected by the wood. For such articles as butter and milk, the spruce barrel is the favorite, as the wood is white, clear and tasteless. The supply of fir and spruce is practically inexhaustible.

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