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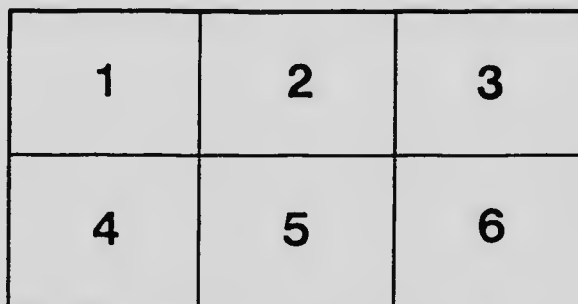
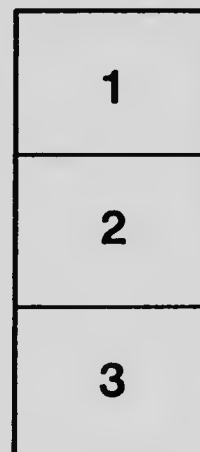
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BULLETIN No. 29.

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DEPARTMENT OF AGRICULTURE

--OF--

BRITISH COLUMBIA.

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POULTRY INDUSTRY ON THE PACIFIC COAST.

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*Hon. Price Ellison,*  
*Minister of Agriculture:*

DEPARTMENT OF AGRICULTURE,  
VICTORIA, B. C., 18th October, 1908.

SIR.—I have the honour to submit herewith Bulletin No. 20, entitled "The Poultry Industry on the Pacific Coast," compiled by M. A. Jull, Live Stock Commissioner.

I have the honour to be,  
Sir,

Your obedient servant,

WM. E. SCOTT,  
*Deputy Minister of Agriculture.*



1... The Penitry Industry Invading the Forest.

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## THE POULTRY

**T**HIS report on poultry conditions in different parts of the United States will be better able to be engaged in poultry-raising in these States is in poultry-raising as have more readily in other places.

The great new opportunities. What land and for his favourable conditions.

Our attention to the Oregon Experiment Station, Columbia.

Many and different conditions have a all of these conditions is bound to progress it is more independent failure of the fruit does not necessarily produced than most than almost any other.

It is almost impossible to get a centre of the and no written record section of the country million fowls kept twenty square miles themselves small comparatively few Petaluma, rather

# POULTRY INDUSTRY ON THE PACIFIC COAST.

By M. A. JULL.

This report has been prepared with the object of familiarising the reader with poultry conditions along the Pacific Coast. By a comparison of methods as used in different sections of the Coast country, the poultrymen of British Columbia will be better able to apply methods adaptable in the particular locality where they are engaged in the business of poultry-keeping. Many valuable lessons may be learned from the poultrymen of California, Oregon, and Washington. The industry in those States is in a more advanced stage than in British Columbia. The possibilities in poultry-raising seem to have been realised to a much greater extent, and the farmers have more readily taken advantage of their opportunities. What has been accomplished in those places may be done in our own Province, under existing conditions.

The great need at the present time is to bring the farmer to a realisation of his opportunities. Where does the farmer stand? Is he making the best of his opportunities? What is his outlook? Is he getting the largest possible returns from his land for his labour? Can the returns be increased, and, at the same time, can better conditions be brought about which tend for larger profits in the future?

Our attention will be centred chiefly upon the industry at Petaluma, California; the Oregon Experiment Station, at Corvallis, Oregon; the Western Washington Experiment Station, at Puyallup, Washington; and conditions as found in British Columbia.

Many and diverse are the elements which have gone into the building-up of the important and remunerative industry of poultry-raising. The climatic and other conditions have a gradual variation from California to British Columbia, and yet, under these conditions, some of which may truly be said to be adverse, the poultry industry has advanced to progress. In many ways it is different from any other industry. Probably it is more independent of the climate and soil than fruit-growing or grain-growing. A failure of the fruit crop through frosts or failure of growing crops in time of drought does not necessarily imply a diminished supply of eggs. Eggs are more economically produced than many other staple food products, and a poultry plant requires less labour than almost any other branch of farming.

## CALIFORNIA.

It is almost impossible to adequately describe the poultry industry of the greatest poultry centre of the world, Petaluma. No series of photographs can show it just as it is, and no written article can place before the eyes of those who have never visited that part of the country a pen picture of the industry as it is carried on. The two million fowls kept in the Petaluma district are distributed over an area of about one hundred square miles. The small valleys which nestle among the rolling hills are in places densely covered with small poultry centres. The configuration of the country is such that only a relatively few fowls may be seen at any one time. One might well wonder why Petaluma, rather than any other particular place, has become so famous as a poultry



Fig. 1.—In sunny California, showing the extent of the poultry industry at Petaluma, where there are over two million hens converting grain into gold.

centre. It has not come by chance, though there are other parts of California, such as Sacramento and San Joaquin Valleys, which are admirably adapted for the keeping of poultry in large numbers. These are fast coming into prominence as poultry-raising sections. The valleys of California that are sheltered by the mountains and have transportation facilities are developing rapidly. Petaluma, in Sonoma County, a city of 7,000 inhabitants, is situated about forty miles north of San Francisco, and is about twenty or thirty miles inland from the coast. It lies on an inlet of the Bay of San Francisco, and is thus connected with the market by water and rail. Its transportation facilities have been an important factor in the development of the industry. It is found that Petaluma, Santa Rosa, Healdsburg, Cloverdale, and other smaller towns in Sonoma County supply San Francisco with about one-half of her annual receipts of eggs. Petaluma alone sent out last year 7,150,481 dozen eggs and 120,018 dozen fowls. It is a city which has been built by the hen, and its future depends upon this common fowl. Statistics show that the hens of Petaluma convert from the raw materials the much-demanded finished product, the egg, at the rate of \$457 worth per hour, for ten hours a day, for 365 days in the year. This is the result of a gradual process of development. It might be interesting to note that poultry-raising has taken the place of potato-raising, which, in turn, took the place of wheat-growing, one of the first occupations of the

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Fig. 2.—A

settlers in California. At present there is no indication that this industry is declining. The following figures give the exports from Petaluma from 1902 to 1909. In the total production, to these figures must be added the eggs used for hatching, and the eggs and other poultry produce used for home consumption:

Year.	Eggs, Doz.	Poultry, Doz.
1902	3,407,333	32,535
1903	3,401,321	32,246
1904	3,837,061	36,302
1905	4,331,321	39,938
1906	4,422,004	39,392
1907	5,312,004	63,136
1908	7,130,481	120,018

From this it may be seen that the industry is receiving greater attention, and that the country is being realized as never before.

**PETALUMA EGG EXCHANGE**

Organization among the producers and a system adopted for grading eggs and an encouragement to more careful methods. There has been established an Egg Exchange based on the co-operative system. The producers deliver their eggs to the exchange, where they are candled and graded. Of the total product of Petaluma, only



Fig. 2.—A grading scale. No. 1 eggs must weigh 1 5/8 ozs.

a portion is handled through the Exchange. This seems rather peculiar, since the prices paid by the Exchange are considerably above other quotations. It points to the fact "that farmers are probably the most difficult class of men to engage in any co-operative undertaking." The Egg Exchange, however, is meeting with continued success, and is extending its operations. At the present time it handles eggs only, though it hopes in the near future to purchase foodstuffs and sell them to the producers at reduced rates. The eggs received from the producers are graded into three grades—Nos. 1, 2, and 3. All eggs passing into No. 1 grade must be spotlessly clean, and weigh  $1\frac{1}{2}$  ounces. This makes one dozen weigh 22 ounces. No. 2 grade are smaller eggs, while No. 3 are culls and cracked eggs and are used locally. The difference in price between grades No. 1 and No. 2 varies considerably from 5 cents to 20 cents a dozen. The average price for all eggs, including the washed ones, in 1909, was 27 $\frac{3}{4}$  cents.

One only needs to watch the steady growth of the poultry industry at Petaluma to realise the importance of co-operation in the selling of the produce from the flocks. The system established at the Egg Exchange is based upon practical facts rather than upon theory. Thirty-two years ago there was practically no poultry in or around Petaluma. In the early history of the industry there was no co-operative system; the poultrymen sold their eggs and fowls to the "middlemen." Many of these middlemen represented feed companies and commission houses. When dealing with the grain houses the



Fig. 3.—The colony system of housing as used in the valleys of California.

company often allowed the lowest prices in any way, being in San Francisco, Los Angeles, and other cities. The poultrymen of the Exchange, however, by dealing with the poultrymen directly, probably its value at that standpoint. It is as fresh a state between a good and an adopted improved and graded and that the egg is at the shipment. He receives the best prices. The greater are the profits secure his production.

Co-operation profits of the "middlemen" the business of poultry.

Poultry-raising into a specialised industry are finding it necessary. They find that better others engage in laying and breeding expect to see it take

Considerable Oregon. Educational of the Oregon Agricultural 96. "The Poultry in Oregon is an industry that State, I quote

1879 . . .  
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1899 . . .

"The import to be abandoned,

We in British statement. There dollars for eggs exporting.

any often charged the poultryman top prices, in return for which he generally had the lowest market quotations for his eggs. The eggs were not candled or graded in any way, being forwarded through the buying agents direct to the markets in San Francisco, Los Angeles, and other places. Now, however, different conditions prevail. Poultrymen are beginning to realise the advantages of improved market conditions. An exchange, which has been in practical operation about two years, provides the poultrymen with the special market advantages and is a great educational factor. Doubtless its value as an educational institution is as great as its value from a monetary point of view. It teaches the producer the necessity of sending the eggs to the consumer in the best state as possible, and it teaches the consumer the difference in quality between a good and a bad egg. The producer soon realises the benefits derived through the use of improved methods. He receives top prices for his eggs, which have been candled and graded, and sent to the market in a strictly fresh condition. He realises that his egg is at its best when laid, and that its value decreases while being held until it is sold. He realises that eggs shipped in clean cases, fitted with clean fillers, command the highest prices. It represents quality, and the higher the price above the average, the greater are the profits. Finally, the producer realises that the consumer is anxious to purchase his product if he will deliver it in the best possible condition.

Co-operation, when properly applied, eliminates the influence as well as the excessive profits of the "middleman." It brings the producer and consumer together, and places the business of poultry-keeping upon a stable basis.

A SPECIALISED INDUSTRY.

Poultry-raising in California, and more particularly in Sonoma County, is developing into a specialised industry. The industry has attained such magnitude that poultrymen are beginning to find it necessary to devote their entire time to one line only of poultry-raising. They find that better results may be obtained. Large hatcheries are in operation, while others engage in the brooding of the chicks, and some of the poultrymen keep only the best and breeding stock. This course of development is only natural, and we may expect to see it taken up in other parts.

OREGON.

Considerable attention is being given to the development of the poultry industry in Oregon. Educational and experimental work is being carried on by the Poultry Division of the Oregon Agricultural College, and much is being accomplished. In Bulletin No. 10, "The Poultry Industry in Oregon," Professor Dryden says: "The poultry industry in Oregon is an important one. To show how the poultry business has been growing in this State, I quote the following from the census reports for three decades:—

1879.....	1,654,738	dozens of eggs.
1888.....	4,453,933	" "
1899.....	7,709,970	" "

The importance of the industry would be better realised if poultry-keeping were abandoned, and this sum of money sent out of the State for poultry and eggs."

The people in British Columbia are in a position to appreciate the significance of the last statement. There is sent out of this Province annually over two and a quarter million dollars worth of eggs and other poultry produce. Instead of importing, we should be producing.

Continuing, Professor Dryden says: "The industry is therefore an important one in this State, and when it is considered that these results are secured without any particular effort to get the best possible returns from the poultry, they are remarkable. No other branch of agriculture probably has been more neglected than this, and little has been done in a systematic way to increase the production of the flock on the average farm. This is shown by the fact that the hens of Oregon were credited by the census with an average of only 72 eggs per hen, when it is possible to nearly double that yield by better methods and better breeding.

"The market conditions are favourable for increased production of poultry and eggs in this State. In few sections of the country are the prices of poultry better than they are in Oregon, and on the Pacific Coast generally. That the markets here are better than in other sections of the country is shown by the fact that large quantities of eggs and poultry are imported from the Middle West States. Figuring on a basis of 75 cars of 30,000 cases, at 25 cents a dozen, there was sent out of the State in 1907, for eggs, \$225,000. The best information obtained indicates that the importations of dressed poultry reached a value of from \$75,000 to \$100,000 last year. The State more nearly meets the demand for poultry than for eggs. But the local supply has not been keeping pace with the demand for poultry. The demand for both poultry and eggs has been increasing faster than the supply, and there is no danger of overproduction. The

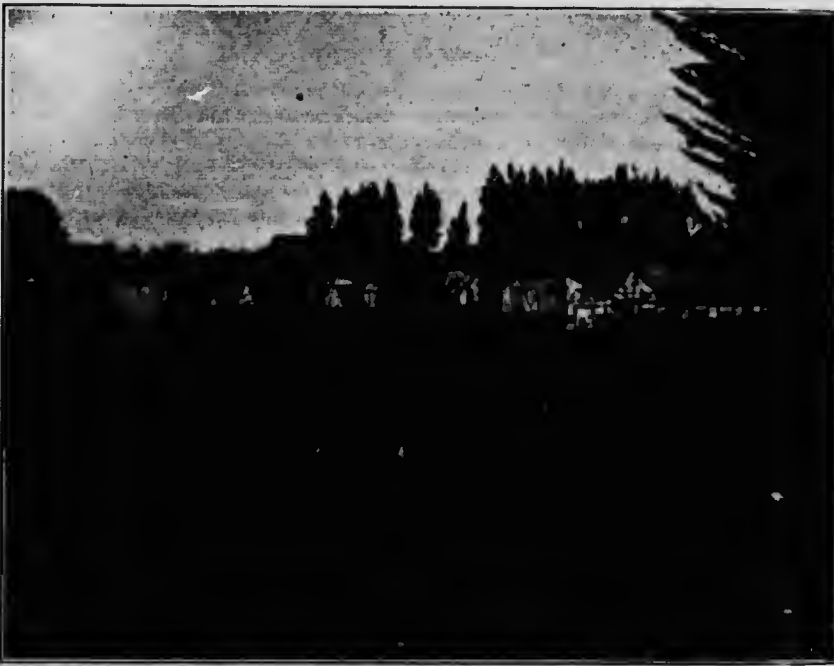


Fig. 4.—Fruit and poultry may be combined with profit to both.

reverse is true. Now there are also good at 40 cents are good markets, therefore,

"That there is be apparent from a and the Pacific States demand increasing in the past few years from other States. of poultry and does affecting the prices.

The poultry in the last two years, shown throughout the industry in this State. Oregon business of poultry the State. Oregon Experiment Station Puyallup. There Experiment Station out problems of a farmer. A great Experiment Station farm. The idea is average circumstances.

The large cities in Seattle are usual. The number of fow present time. Was Middle States, as well the neighbouring States meet the constant a

The total number ing to the census, w bred, in 1901. This against 1,360,574 in increased rather over in 1901, 14,851,347 following table shows in 1901:—

is true. Not only is there a good market in Oregon for eggs and poultry, but there are also good markets in neighbouring States. Eggs that are quoted in Portland are quoted in Seattle at 48 cents, and in San Francisco at 53 cents. Our prices therefore, will be governed largely by those to the north and south of us.

#### "THE POSSIBILITIES.

That there is room for great development in the poultry industry in this State will be evident from a study of the conditions of the industry and of the markets in Oregon and the Pacific States. There is a large and stable market right at home, with the demand increasing faster than the supply. This is shown by the increase in prices during the past few years, and by the increase in importations of eggs and poultry from other States. There is but little doubt that the farmers could double their flocks and double the output of poultry products without seriously, if at all, affecting the prices."

#### WASHINGTON.

The poultry industry in California and Oregon has been progressing rapidly during the past two years, and more recently increased interest in poultry-raising has been shown throughout Washington. The prevailing conditions which affect the poultry industry in this State are of much the same nature as found in Oregon; also the practice of poultry-keeping is spreading from along the coast-line into the interior of the State. Oregon is doing a great deal of investigation in poultry problems at the Experiment Station at Corvallis, while Washington is engaged in similar work at the Experiment Station. There is a well-equipped Poultry Department at the Western Washington Experiment Station, with Mr. H. L. Blanchard in charge. The Department is working on a number of problems of a practical nature, the results of which will be of great benefit to the poultry raiser. A great deal of work along educational lines is also taken up. At the Experiment Station the fowls for the first year are being kept as on the ordinary farm. The idea is to learn just what profits may be expected from the flock under the prevailing circumstances. Eventually, experimental work will be undertaken.

The large cities in Washington afford excellent markets for all produce, and prices for poultry are usually good. There is no probability of the industry being overdone. The number of fowls on the farms is increasing, and conditions are improving at the same time. Washington imports large shipments of eggs and other produce from the States, as well as from the South. As conditions improve, the poultrymen of the neighbouring State will realise increased profits, and the supply will more nearly meet the constant and increasing demand.

#### BRITISH COLUMBIA.

The total number of hens and chickens in the Dominion of Canada in 1891, according to the census, was 12,696,701, as against 16,562,084, of which 236,505 were pure-bred in 1901. The ducks, geese, turkeys, and other fowls numbered 1,488,401 in 1891, and 1,360,574 in 1901. The decrease was in geese, ducks, and other fowl; turkeys increased rather over 100,000 in the ten years. Of the total number of hens and chickens 14,851,347 were kept on farms, and of these 177,878 were pure-bred. The following table shows the value of poultry and eggs produced in the different Provinces



	Eggs.	Poultry.
Ontario .....	\$5,750,221	\$3,125,160
Quebec .....	2,007,320	1,160,314
Nova Scotia .....	543,108	215,223
New Brunswick .....	372,745	213,219
Manitoba .....	605,534	417,586
British Columbia .....	426,620	209,717
The Territories .....	326,848	226,376
	\$10,286,828	\$5,720,760

From the above it will be seen that of Canada's total value of \$16,007,586 of poultry products in 1901, British Columbia produced eggs and poultry to the value of \$636,346. But conditions have changed since that time.

The average number of poultry kept on the Canadian farm in 1901 was 34.24 and the average number of eggs produced was 159.66 dozen, making an average individual product per hen of 5.25 dozen, or 63 eggs. The average number of poultry per farm in the different Provinces in 1901 was as follows:—

Ontario .....	50.93
Prince Edward Island .....	43.24
British Columbia .....	43.22
Manitoba .....	34.50
The Territories .....	22.52
Quebec .....	22.49
New Brunswick .....	18.75
Nova Scotia .....	14.60



Fig. 5.—There are thousands of acres of partially-cleared land in British Columbia well-adapted for poultry-raising.

VICTORIA:  
Fresh eggs .....

Imported eggs .....

VANCOUVER:  
Fresh eggs .....

VERNON:  
Fresh eggs .....

Imported eggs .....

SEASIDE:  
Fresh eggs .....

Imported eggs .....

1. *Management*  
poultry-raising  
management is  
success, there are  
dollars have be  
judgment should

Fig

EGG PRICES, 1909.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
IA: h egg	60	55	40	35	30	35	40	40	45	60	60	50
orted eggs	40	30	30	.....	.....	.....	30-35	30-35	35	55	55	35
VER: h eggs	60-75	60	35-40	35-40	35	35	35	35-40- 45	30-40- 50	30-40- 50	45	50
h egg	50	50	30-35	25	25	30	35	35	35	40	60	60
orted eggs	40	40	.....	.....	.....	.....	.....	.....	.....	.....	35	40
h egg	65	65	50-75	45	40	40-45	45	50	55	65	75	65
orted eggs	35	45	40	40	30	30	30	30	30	35	35	35

EXISTING CONDITIONS AND SUGGESTED IMPROVEMENTS.

*Management.*—More and more it is being demonstrated that experience in poultry raising is necessary because of the details of the business. More efficient management is essential. While we have a few poultrymen who are making good success, there are also a number who are making an absolute failure. Thousands of dollars have been lost by beginners. Generally speaking, greater care and better management should be exercised by those who start in the poultry business.



Fig. 6.—Intensive Poultry-keeping on red Land.

2. *Breeds.*—More farms throughout the Province should have flocks. The number of fowls on a farm should be greatly increased. The quality of the laying stock must be improved. What are the comparative returns of an 85-egg hen and a 150-egg hen, when it costs practically as much to keep one as the other?

3. *Houses.*—Why is so much money needlessly expended in costly buildings? More satisfactory results may be obtained from convenient, inexpensive houses, which are adapted to supply the fowls with fresh air at all times and yet keep them comfortable.

4. *Feeds.*—With our high-priced feeds, the main object is to economize. Is the poultryman justified in feeding the more expensive grades when lower grades are just as good for egg production? Are our fowls supplied with enough green food? Exercise is one of the most important considerations in the production of eggs, and this is just what many of our hens do not get.

5. *Markets.*—Our large importations and variations in quotations on local produce is suggestive that marketing conditions need improving. Eggs and dressed poultry are often sent to market in a most unsatisfactory manner, resulting in loss of money to the producer. The wastes of the present system of marketing must be eliminated. Co-operation is the keynote to the situation.

Success in poultry-keeping largely depends upon the careful and efficient attention to detail; while the industry is being developed we should make better use of what we have.

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VICTORIA, B. C.:

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