

Branch House at Saaz.

NUREMBERG, BAVARIA July 18th 1930.

Hop Report for 1929 30.

Last year's falling tendency of the German economical situation was essentially aggravated by the world's crisis in finances and raw materials, setting in towards the end of 1929. It has led to a heavy depression in Germany's economical life which is still continuing. Lack of capital, a fiscal system almost prohibitive as to formation of new capital, and a rigid system of wages based on erroneous considerations, hamper Germany's economical development. Against a round increase of 2% of income in wages stands the high figure of the dole (15/6/1929: 951.700;15/6/1930: 1.857.800).

Germany's foreign debts, according to experts, amount to 15 milliards of Reichsmark, its reparation payments as fixed by the "Young-plan" can be paid only with sums resulting from export surplus or new loans. In 1929, Germany's export trade showed a small overbalance of 47,6 millions of RM.

The production of beer of the various countries given by calendar year or per fiscal year respectively is shown on the following table.

Beer-Production

Production of Beer in 1929.

A CONTRACTOR OF THE PROPERTY O		<u> </u>		CARLO MARKET AND	
	1000 hectolitres		1000 hectolitres		1000 hectolitres
*Germany	57028	*Roumania	867	*Bulgaria	84
*Great Britain	31789	*Mexico1928	680	Ecuador	82
*France		Spain,	670	*Bolivia1928	82
Belgium	15770	*Hungary	602	*Lithuania	82
*Czechoslovakia	12162	Jugoslavia	600	Panama	75
United States of Amer.	8000	*New Zealand	582	*Egypt	73
*Austria	5275	Chili	560	*Greece	69
*Irish Free State	3480	*Norway	509	China	60
*Australia 1928	3364	Cuba	402	*Philippine Islands .	40
*Canada 1928		*British South Africa		*Turkey	40
*Switzerland	2541	*Finland	333	Guatemala	30
Poland 1928	2510	Columbia	315	*Congo	22
*Netherlands1928	2273	*Uruguay	190	*San Salvador .1928	20
*Denmark	2118	Venezuela	150	*Paraguay	19
*Sweden	2052	*Peru	130	Costa Rica	18
Russia	2000	*India1928	115	Honduras	15
*Argentine1928	1981	Portugal	100	Haiti	5 5
*Japan 1928	1600	*Algeria	100	Jamaica	
Brazil 1927		*Livonia	95	Nicaragua	3
*Italy		*Estland		* official figures.	

Beer-Production.

In 1929, the world's beer-production amounted to 185,2 millions of hectoliters (1928: 186,6 millions of hectoliters).

During the year 1929, the excellent quality of German beer was the cause of its increasing popularity as an agreeable beverage; German beer-production rose to 57.027.530 hectoliters (1928: 54.996.643 hectoliters; 1913: 66 millions hectoliters with the deduction of 3 millions for the lost territories). To a general improvement in quality may be attributed the increased sale of beer in France (6,79%) and in Belgium (8,8%). Worthy of note is the successful, joint propaganda in Central and Southern Italy of the Italian Brewing Industry, which is being extended also to Northern Italy. An increased beer-production, in comparison with 1928, is further reported from Bulgaria (9%), Chile (24,5%), Czechoslovakia (5,1%), Ireland (7%), Italy (14,6%), Panama (87,5%), Spain (8%), Switzerland (8,6%).

In Columbia heavy economical depression reduced beer-production which had rapidly grown within the last few years. In England, the decrease of production continues. The sinking tendency on the world's markets finds its expression in a retrograding production in a great number of countries, as for inst. Bolivia, Cuba, Egypt, Finland, Greece, Guatemala, Hungary, India, Lithuania, Livonia, Peru,

Roumania, Russia, Turkey.

On April 15th, 1930 a law modifying heer taxation in Germany entered into force and became effective May 1st, which law provides the following increased taxes:

$\mathbf{u}\mathbf{p}$	to		1.000	hl	RM.	9,—
fror	n the	first	2.000	22	22	9,50
fror	n the	following	8.000	22	"	9,70
,,	,,	"	10.000	22	22	9,90
,,	22	,,	10.000	22	99	10,20
"	22	,,	30.000	"	22	10.50
22	,,	,,	30.000	,,	22	10,80
,,	,,	,,	30.000	"	22	11,40
for	any	exceeding	quantity	y	99	12,00.

Newly founded breweries are bound to pay double taxes until 31/3/1935. On March 31st, 1929, there were existing 6401 breweries in Germany. Also in Denmark, England, Italy and Roumania, an increase of the beer tax has recently been effected; in Czechoslovakia a bill has been prepared for this purpose.

The German Tavern Law of April 28th, 1930, passed after long deliberation, intends regulating the public house trade and provides measures against the abuse of alcoholic drinks.

Growth of 1929 hops.

Beer Tax.

In consequence of the cold temperature in winter 1928/9, that had sunk as low as 35 degrees Celsius below freezing point in German hop-growing districts, work in the gardens began later than usual, i. e. towards the middle of April. The plants had wintered well. Fears that damages might have been caused by the hard frost were not realised. Beginning of May, the uncovering was done. Towards the end of May, the gardens which everywhere had sufficient humidity, were behind in their growth for about a fortnight. In many districts, shoots infected by downy mildew, shot up from the soil and had to be removed. As in every year, fleas had to be combated, but owing to the rapid growth of the plants they could not do much harm. Beginning of June, heavy rains at high temperatures favoured the reappearance of downy mildew in the Hallertau and Aisch districts, in the mountainous regions, in Alsace, Belgium and Roumania. From the Auscha district, damages caused by the red spider were reported in gardens where poles are in use; about the same time the first tidings came in from Saaz and Alost about the appearance of aphids.

Towards the middle of June, the condition of the gardens was considered excellent, the vigourous plants having grown up to more than half the height of the poles; in the second part of June, good weather likewise favoured the growth of the plants that were producing abundant side-shoots. In spite of almost daily thunderstorms bringing warm rains, a further spreading of the downy mildew was not remarked. The low temperatures setting in beginning of July retarded growth.

By the end of June, the greater part of the plants in the Saaz and Auscha districts had reached full height. Vermin, although combated by spraying, further increased.

On July 4th, 1929, violent hailstorms caused severe damages in Austria, the Spalt and the Saaz districts.

Favourable Summer weather. Sunny warm weather with warm rains influenced the growth most favourably; from almost all hop-growing districts, with the exception of Czechoslovakia, there came reports of exceedingly favourable conditions of the plants, showing vigourous and rich side-shoots. Diseases and vermin were not especially noted. In the second part of July, blossoms began to develop into cones. The first early hops, which towards June 20th had begun to blossom, were picked at Tettnang the beginning of August.

In Central Europe, the formation and ripening of the cones proceeded under favourable weather conditions. Only during the week before picking began, the weather in Germany was rainy, so that the plants were again seized by downy mildew, which was immediatly combated.

Picking.

Picking began between August 20th and 23rd, and in Germany continued up to the middle of September. During this period the weather was warm and dry which favoured ripening and harvesting. In Germany the picking was done with greater care than in the preceding years, partly owing to the growers following the exhortations of the Hop Growers Association.

Estimates.

The system of estimates practised up to now has been altered in Bavaria. The new system was applied for the first time in September 1929 by the communities in accordance with the trustees of the Hop Growers' Association and the government's agricultural reporters. The results thus obtained were examined by the local authorities. The new system is no doubt an improvement on the former one, and it seems desirable to stick to it. The official German estimate of September 1929 stated 227.470 cwts. for Bavaria and 272.830 cwts. for Germany. In order to avoid errors, the introduction of an uniform "peck", viz. measure of capacity, appears recomm

sizes everywhere. The German Hop Growers' Association following this suggestion would be gratefully

acknowledged.

The final estimates, given in the following, were compiled on June 16th, 1930, as is always done about this time of the year by the interested circles under collaboration of the Office for Statistics, Munich.

The following table shows the crops of 1927, 1928 and 1929:

World's Hop Acreage and Production.

	7	creage	`	Yield	per he	ectare	Our estin	nate of th	Official estimates	
Descharted assertates		lectare		1	in cwts.		ín	1000 cv	vts.	in 1000 cwts.
Producing countries					Kilos		of	50 Kilo		of 50 Kilos each
	1927	1928	1929	1927	1928	1929	1927	1928	1929	1929
Hallertau	7099	7351	7708	19	20,8	24,2	124	147,8	178	168,758
Spalt	1669	1753	1715	9,2	10,5	9,3	14			15,549
District of Hersbruck	2785	2400	2276	8,9	8,5	15,3	25	20,4	35	29,224
Valley of the Aisch	758	652	57 8	6,9	8,4	13,9	5	5,5	8	7,094
Various countries	577	580	569	7	6,9	12,3	3,3	4	7	6,845
Bavaria	12888	12736	12846	14,2	15,3	19,1	171,3	195,3	244	227,470
Wurttemberg	1909	1803	1755	13,6	11	22,2	23	20	39	31,128
Baden	613	628	550	27,3	11,4	23,6	10	7	13	12,800
Prusia etc	97	106	73	15,5	13,4	20,5	1,5	1,3	1,5	1,432
Germany	15507	15273	15224	14,5	14,6	19,5	205,8	223,6	297,5	272,830
Saaz	12590	12582	13362	16,8	10,9	14,8	169	137,5	187	161,8
Auscha-Dauba-Raudnitz	3211	3520	3478	20,8	16,7	15,5	53	53,7	54	45,7
Moravia etc	557	407	424	14,5	13,4	14,7	4	5,5	6	5,7
Czechoslovakia	16358	16509	17264	17,5	12	14,9	226	196,7	247	213,2
Wojwodina	9500	9000	7000	16,6	8,6	. 5	75	78	35	-
Slovenia	3700	3000	3000	25	18,6	16	50	56	48	
Jugoslavia	13200	12000	10000	19,2	11,1	8,3	125	134	83	_
Various countries	613	600	600	17,3	10	15	5	6	9	_
Poland	3250	3875	3600	20	16,3	20,8	50	56	75	35
Alsace	3084	3040	2816	27,5	16,4	32,8	75	50	92	92,7
Burgundy and Lorraine	1289	1360	1308	20,8	11,6	24,4	25	15	32	31
Northern France	474	410	450	47,1	48,8	41,4	20	20	17	16,2
France	4847	4810	4574	27,5	17,6	30,8	120	85	141	139,9
Belgium	1480	1470	1235	39,5	29,7	32,3	56	43	40	-
Russia	3000	5265	5000	25	10	6	60	30	30	. –
Continent	58255	59802	57497	19	13,2	16	847,8	774,3	922,5	
England	9309	9633	9706	27,9	28,4	41,5	287	265	400	364,5
Europe	67564	69435		20,6	15,3	19,6	1134,8	1039,3	1322,5	
Timber 3 Control C 4										001.1
United States of America.	9955	10562		33	28,9	29,7	278,1	290	300	301,4
Canada	420	425	471	21,4	21,4	35,3	12,9	9	15	-
Australia and New Zealand	700	700	1000	25,7	25,7	40	18	18	28	<u> </u>
World's production	78639	81122	78750	22,4	17,2	21,1	1443,8	1356,3	1665,5	I —

Already before the 1929 harvest, the brewing industry was provided with abundant stocks: viz. Germany 150.823 cwts. = 71.5% of a year's consumption, Belgium 44%, Denmark 58%, the Netherlands 92.8%, Sweden 63% and Switzerland 52.8% approx.

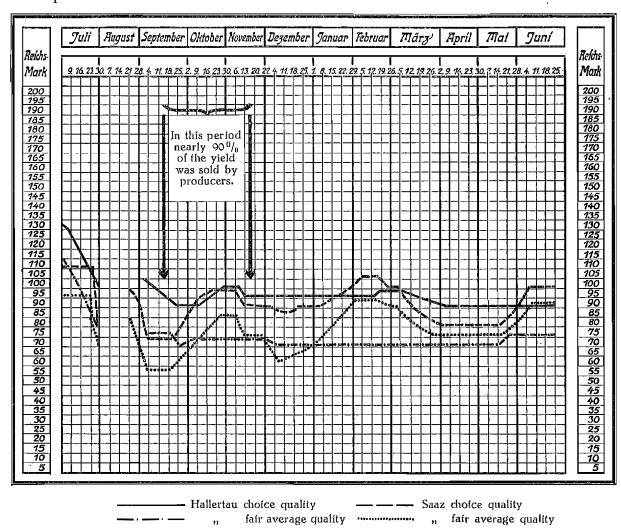
The extraordinary low prices encouraged brewers in all countries to acquire further ample stocks of 1929 hops.

Under the impression of the abundant crop, quotations for 1929 hops set in low, at Tettnang towards August 10th at 120 RM., in the Hallertau district end of August from 75/105 RM., in Spalt from 90/130 RM., in Saaz from 800/900 Kc., in Auscha from 700/800 Kc. per 50 kilos.

Stocks of the Brewing Industry,

Prices for 1929 hops.

The following table shows the prices of 1928 hops in July 1929, as well as of 1929 hops, to be understood per 50 kilos at the producers' for the best available and middle qualities of Hallertau and Saaz hops.



Notwithstanding these low prices, sales began only towards the middle of September after the lowering of the prices in consequence of the pressing offers by the producers. The prominent feature after the crop was the speculative selling at ruinous prices by many Czechoslovakian traders, anticipating the fall of quotations by submitting every day cheaper offers at partly quite impossible prices, by selling blank. The large crop obtained from widely increased acreage in the Saaz district drove the producers to sell in a hurry at any price offered, whilst the German hop growers could but slowly consent the low prices that gave them no compensation for all the work done during the growing and the harvesting periods.

The main sales were effected between middle of September and middle of November at prices showing a slowly rising tendency; within these two months in the Hallertau, Spalt, Saaz and Auscha districts, 90% of the crop was disposed of, in Poland and Jugoslavia 50% respectively. From that time on, apart from unimportant fluctuations, especially as to German hops, the hop trade has been pursuing a calm and normal course.

The law of protection of the origin of hops, that has passed the Reichstag on 9/12/1929, came into force on 10/6/1930 and embraces all German hop growing countries: Bavaria, Wurttemberg and Baden.

In Bavaria there will exist in future the following producing regions: Hallertau, Spalt, Jura, Hersbrucker Gebirge and Aischgrund.

The region of Hallertau is divided into 13 "sealing-districts" viz.: Abensberg, Au, Geisenfeld, Hohenwart, Langquaid, Mainburg, Nandlstadt, Neustadt a. Donau, Pfaffenhofen, Pfeffenhausen, Rottenburg, Siegenburg and Wolnzach.

The Spalt-region embraces 3 districts, viz.: Spalt-Stadt, Spalt-Bezirk and Spalt-Kreis.

The Jura-region consists of the regions of Altmannstein and Kinding.

In Wurttemberg will exist in future the region of Tettnang and that of Rottenburg—Herrenberg—Weilderstadt.

Baden is divided into 3 districts: Nordbaden, Mittelbaden and Bodensee.

German Law of Protection of Origin.

All German ho

foreign consumers will have the same possibility of receiving German hops with seal and certificate. The marks on the bales, that have to conform with the certificate, prove the origin of the hops. The present conditions for export remain unchanged until 10/6/1935. Very inferior quality and badly dried hops can be excluded from sealing on demand of the buyers. The law lays open the possibility of forbidding the culture of inferior sorts.

It is to be expected that the new law will enforce an improvement of quality in the culture of hops and thus serve to further raise the fame of the already renowned German hops.

For the next years the regions of the Hallertau, Spalt and Tettnang will gain much advantage by the new law.

The "Staatliche Untersuchungsanstalt Weihenstephan" and "the Wissenschaftliche Station" in Munich have as usual analysed the bitter substance in 1929 hops and came to the following figures to which we add those of the two preceding years.

The bitter substance in 1929 hops is higher than that of 1928, the amount of water is inferior owing to the dry weather during picking.

Freshly picked, green hops contain over 80% water (1929 = 81,55%).

1929 Bitter Bitter Bitter Origin Percentage Percentage Percentage substance substance substance of water of water of water without water without water without water % % % % 9,7—12,6 13,5—18,6 9,2—11,7 11,5—16,4 8,3—10,7 |13,5-17,0|Hallertau 15,0—17,0 15,1—16,3 13,5—17,5 10,7—12,6 9,7—10,1 8,6— 9,0 Spalt Valley of the Aisch . . . 11,9 14,1 9,5 13,0 8,7 13,5 12,3—15,2 13,8—15,013,0—13,4 12,2—12,5 7,7—16,8 9,4—10,3 8,4—10,0 | 15,1—16,8 8,6—10,4 | 14,4—17,9 District of Hersbruck . . . 14,4—17,9 13,7—15,6 12,5—15,8 12,9—14,6 13,4—19,2 17,5—18,7 Wurttemberg. 9,3—11,8 Baden 15,2 10,4 9,1 9,2 16,7—17,1 15,2—17,0 8,7— 9,9 8,1—11,8 9,3— 9,8 13,0—16,4 Auscha 11.8 12,1—12,7 12,4—12,7 11,8—13,2 11,8—12,4 11,5—11,9 9,1— 9,9 13,4—15,2 11,9—13,5 9,1— 9,6 13,5—14,1 Alsace-Lorraine 10,5 15,3 9,7—10,3 14,2—15,6 Styria (Goldings) 10,6—12,4 9,2-9,713,9-15,4 9,0—11,5 9,7—11,2 15,2—17,0 7,5—16,4 9,4-11,0 14,8—14,9 Backa 15,7—15,8 13,1—14,6 13,3—15,1 8,8—10,5 Poland Russia (Volhynia). 13,8* 10,6—12,3 | 13,3-13,6* 8,4 14.0 *air dry

The rapidly rising beer production in post-war years encouraged the producers in all hop-growing countries to rapidly increase the acreage. In the last years this area has extended far beyond the possibilities of producing a crop at lucrative prices.

In addition to this, the 1929 crop showed everywhere good and partly extraordinary abundant yields.

Already during harvest time, prices set in so low that large quantities remained unpicked, the picking-costs often exceeding quotations. The prices sank even to a lower level than that of the years 1905/08 and 1895, the lowest ever attained.

In Germany, with an average price of 60 RM. per 50 kilos, there resulted a loss of 80 RM. and more against the cost of production of 140/150 RM. per 50 kilos (35 RM. for picking included). The 1929 crop is calculated to have caused a loss of round 15 millions Reichsmark (£750.000) to the producers of the Hallertau and of round 23 millions RM. (£1.150.000) to those of entire Germany, prices. The conditions are much alike in all hop-growing countries; none of them was able to avoid the crisis.

The general over-production enforces all the more a reduction of the acreage, as the methods of growing, the combating of diseases and vermin improve more and more, and therefore ever-increasing crops may be expected in the future. The bad prices paid for the 1929 crop already have imposed the necessity of reducing the acreage to an extent which for the present can only be approximately estimated. The state of things will but slowly become normal again, for the bringing into equilibrium the stocks plus crops on the one hand and the consumption on the other hand, require time, even if bad crops should accelerate this balance.

The relatively advantageous condition of German Hop Growing, compared competitors, in consequence of its large home market, affords a means of remedy of

competitors, in consequence of its large home market, affords a means of remedy other than diminishing the acreage, which is the one remedy left to those countries that have only a limited home consumption. We cannot approve of the advice given by the German Hop Growers' Association, i. e. to reduce the German acreage. A considerable home consumption and a lively export trade afford such possibilities to the German producers who therefore are envied by all foreign hop growers; but clear-sighted guidance is required for the exploration of these possibilities.

Analysis of bitter substance in hops.

Over-production of hops and crisis in prices.

Over-production in hops and crisis of prices.

Considering that a country with prime quality hops will always be able to meet a crisis more easily as buyers of superior quality hops will never be lacking, there ought to be made more propaganda for the German hops to encourage the producers to improve quality and treatment. This would render a greater service to German Hop Growing instead of reducing the acreage in conformity with the requirements of other hop-growing countries, which, as may be seen from the following table, increased their acreage to a very large extent. In Germany growers should limit themselves to exterminating inferior sorts and old gardens and to substituting them by proven sorts. A reduction of the acreage is only advisable where great economical distress makes it necessary.

At the same time we export the German Brewing Industry to give a marked preference to the home produce in order to encourage the hop industry to hold on during the present hard times. Hop-growing is undoubtedly endangered; but further reduction of the acreage owing to unprofitable prices would make the German Brewing Industry more and more dependent on foreign hops. The German Hop Growers' Association demand import duties to be raised to 150 RM.in order to better protect their members against cheap foreign competition. The duty to which Germany is bound by the Commercial Treaty of 1925 with Belgium, and by that of 1927 with France is 60 RM., against the autonomous duty of 100 RM. per 100 kilos.

The hop growers in Belgium and France also ask for higher import duties, whilst the Brewing Industry in the said countries desires the improvement of home-grown hops; as they are compelled up till now to acquire from abroad the hops needed for their fine-quality beers.

The following table shows the acreages in the years 1913, 1919 and 1929.

Hop-production in	, i	Acreag	e	Reductions of acreage reported	Average yield of 10 years	Supposed normal yield in	I lome-cons sumption in 1000 cwts	$\begin{aligned} + &= \frac{E_{xport}}{surplus} \\ - &= \frac{Need of}{surplus} \end{aligned}$
the present territory of	1913	1919	1929	since 1929	per hectar	1000 cwts. of 50 kg each	of 50 kg	imports in 1000 cwis,
Germany	22.203	8.030	15.224	96 15	ewis. 12,6	164	268	— 104
Czechoslovakia	15.854	8.585	17.264	12	15	233	73	+160
Jugoslavia		700	10.000 3.600	25—75	17	64	4	+ 60
Poland	-	510 3.869	4.574	28 28—30	15 22	39 75	18 72	$\begin{array}{cccc} + & 21 \\ + & 3 \end{array}$
Belgium	2.100	1.300	1.235	23	30,9	31	63	32
Russia	1.100	310	600	20	$\frac{-}{14,1}$	$\begin{vmatrix} 30 \\ 7 \end{vmatrix}$? 36	- ? - 29
England	14.437	6.782	9.706	15	32,5	268	334	<u> </u>
U.S.A. and Canada	21.790	9.680	10.547	*20	30,5	2 60	141	+ 119
Australia and New Zealand	845	750	1.000		28,8	29	36	_ 7
World's acreage	102.291	40.516	78.750			1.200		
World's hop-consumption (in 1000 cwts.) · · · · ·	1.665	945	1.200					
*U.S.A. only								

Taking into consideration the reductions of acreage that are reported since the 1929 harvest, and basing the calculation on the average yield within the last ten years, a normal crop will afford about 1200000 cwts. Within this quantity, the amount of the so-called fine-quality hops is calculated to be of about 580000 cwts.

According to the latest estimations, the world's hop consumption is round 1200000 cwts. half of which quantity consists of the above mentioned fine-quality hops used for making low-fermenting beer; the other half are sorts used for beers brewed in England, U. S. A., South Africa, Australia, and in some parts of France and Belgium. Thus, whilst with a normal crop the need in fine quality hops is scarcely covered, the other hops result in a small surplus.

Since 1928, the German acreage in Bavaria has been increased by 113 hectares (710 hectares newly laid-out gardens). In the rest of Germany it has decreased by 159 hectares. The quality of the crop was judged as follows:

	first-rate	middle	inferior
Hallertau	25 %	40%	35 %
Spalt		40%	35 %
Hersbruck & Aischgrund	10%	50 %	40%
Wurttemberg	25 %	55 %	20%
Baden	25%	65%	10 %

It is almost impossible for a larger crop to be obtained in the Hallertau district than was the case in 1929. In the Siegenburg district there were gardens yielding up to 1 kilo per pole, viz. 90/100 cwts. per hectare. Besides such excellent gardens there were a few badly sprayed ones in which the cones

Germany.

discoloured more than was inevitable. This especially refers to the Pfeffenhausen district. Au, with its splendid gardens in the Goldbach Valley and Reichertshausen, harvested a very rich crop, partly 40/50 cwts. per hectare. Mainburg and Wolnzach hops were somewhat impaired by discolouring.

Glorious weather during the harvest favoured drying. Only in a few gardens with rapidly discolouring hops the produce remained unpicked. As to quality, the 1929 produce did not come up to that of the preceding year. Whilst in 1928, 30/36 pecks (measure of capacity for green goods) of 40/50 liters each, were required for making up 1 cwt. of dry hops, in 1929, 40/44 were needed. The same may be said of all hop-growing territories, apparently as a consequence of the dry weather during the period of growth. A careful producer at Au for getting 50 kilos of dry hops, needed the following numbers of pecks of 45/50 liters each in the following years:

1924: 36,68; 1925: 36,82 1926: 35,63; 1927: 41,22; 1928: 36,23; 1929: 43,35 pecks.

Hallertau hops, on account of their renowned rich amount of lupulin and fine aroma met everywhere with an easy sale, but unfortunately the cost of production was not obtained, which with an average yield of 22 cwts.per hectare amounts to about 140 RM. per 50 kilos (35 RM. for picking included).

The Spalt district gave a crop about equal to that of 1928. The considerable difference as to colour and quality may be guessed at from the prices paid. Spalt Town hops were paid 100/130 RM., District hops 60/110 RM., Country hops about 50/100 RM., according to colour and quality. Spalt hops are being more and more sought after because of their incomparable mild flavour.

Wurttemberg. Preference was in general given to early and middle early Tettnang hops. Late hops partly became discoloured. Of all the hops harvested in 1929, Wurttemberg hops have the highest quantity of bitter substance, viz. 17/18%; their richness in lupulin is eminent.

Baden. A yield of 24 cwts. per hectare is uncommonly high. The acreage in 1888, showing an area of no less than 3406 hectares, was reduced to 550 hectares in 1929 and seems to be continuously decreasing.

Aischgrund and Hersbrucker Gebirge. The quality of these hops was lighter than in 1928, only in exceptional cases giving full satisfaction.

 Imports of hops into Germany:
 Exports of hops from Germany:

 1st Sept. 1927—31st Aug. 1928 99098 cwts.
 1st Sept. 1927—31st Aug. 1928 39673 cwts.

 1st Sept. 1928—31st Aug. 1929 84352 cwts.
 1st Sept. 1928—31st Aug. 1929 39457 cwts.

 1st Sept. 1929—31st May 1930 57389 cwts.
 1st Sept. 1929—31st May 1930 44968 cwts.

Up to the beginning of July, the plants suffered from drought and from severe attacks of lice. Those producers who had neglected spraying in time, had to bear the consequence of a smaller yield. The boundaries in particular were affected but even in best soils there were badly cared for gardens to be seen that turned black and gave hardly any yield at all. Only late in July and in August, abundant rains cleared the gardens from vermin and restored the parched plants to new growth. A hailstorm occurring on July 4th damaged the gardens of the upper Goldbach Valley and of the Egerstrom district.

The picking started on August 22nd and continued until about September 8th. The lack of about 5/8000 pickers caused a premature beginning of the harvest, so that the hops picked first were mostly unripe. Throughout the whole of the Saaz district, all the gardens not situated in the lower part of the valleys showed a somewhat weaker growth and smaller cones. The produce was best in the low-lying gardens of the Goldbach Valley, in the 3 valleys of the Bohemian Forest as well as in the Tuchoritz district, partly affording a record yield up to 43 cwts. per hectare whilst the average yield is between 15/20 cwts. per hectare. During the picking period large numbers of fleas made their appearance, impairing both quality and quantity of the crop.

The 1929 Saaz hops are lighter than were those of 1928 (by about 7%), smaller in size and somewhat discoloured. Quality was judged: 25% first-rate, 50% middle, 25% inferior. About 2000 cwts. not picked by the producers for being mottled and reddish, were gathered later on by outsiders.

The initial prices of Saaz hops, 800/900 Kc., by the middle of September had sunk to 250/500 Kc., and in October were again rising up to 600/775 Kc. In December there was another decline to 450/650 Kc.; later on the prices fluctuated to about 600 Kc., yet not surpassing 800 Kc. By far the greater part of the Saaz crop is supposed to have been disposed of by the producers at ruinous prices of about 550 Kc. not even covering the expenses.

We are of the opinion that in spite of the abundance of the crop, the Saaz hops, known and demanded everywhere on account of their excellent quality, should and might have fetched higher prices if the apprehension of not being able to find buyers had not induced a great many producers to accept any offer, thus exerting heavy pressure on the formation of the prices. If in the years to come, the acreage has not been reduced in proportion to reliable export probabilities, these conditions will render the price of Saaz hops greatly dependent on demand.

The Auscha district suffered badly from fleas and vermin in consequence of deficient spraying, so that many growers obtained only half of what they had harvested in 1928. Favoured districts were the Polepp Platte, Webrutz and Ruschowan, with a highest yield of approximately 27 cwts. per hectare. The good quality of the Auscha hops led to a quick sale of the entire crop, though colour was somewhat

Czechoslovakia.

Czechoslovakia.

deficient. As to quality, we judge it as follows; 30% first-rate, 45% good middle, 25% inferior. Semsch-Wrbitz red vine hops are said to have proved to be the best of all the sorts cultivated in the Auscha district. The prices for Auscha hops fluctuated between 300/400 Kc. and 700/800 Kc.

In the Rauchitz district, near Jedybab and Wojkowice, large tracts of land gave no yield at all, having been totally ruined by the red spider. The cones were smaller than in the preceding year. Quality was judged as follows: 25% first-rate, 50% middle, 25% inferior.

The large crop of Czechoslovakia, except for small remainders, has passed into the hands of the brewing industry. There is an intention of extending the obligation of official control also on hops destined for home consumption. Owing to the low prices, imports were less than in former years.

 Imports of hops into Czechoslovakia:
 Export of hops from Czechoslovakia:

 1st Sept. 1927—31st Aug. 1928 12 083 cwts.
 1st Sept. 1927—31st Aug. 1928 171 430 cwts.

 1st Sept. 1928—31st Aug. 1929 10605 cwts.
 1st Sept. 1928—31st Aug. 1929 130 080 cwts.

 1st Sept. 1929—31st March 1930 80 cwts.
 1st Sept. 1929—31st March 1930 170 189 cwts.

Jugoslavia.

A catastrophe almost unheard of in the history of hop cultivation struck this country which from 1924 to 1928 had increased its acreage from 3000 hectares to 12000 hectares. Already in Autumn 1928 and in Spring 1929, in consequence of the low prices paid for the 1928 produce, the acreage of the Wojwodina had been reduced to approximately 7000 hectares (1927 = 9500 hectares). 6300 plants are grown per hectare, mostly late Saaz hops. Of the 1929 crop, only about 30% could be picked, the prices often being below the cost of harvesting and the hops mostly being sunburnt and impaired by the red spider and downy mildew. In the Backa, part of the Wojwodina, during the harvest period, prices ran from 300/500 Dinars per 50 kilos; but later on they went down to 150/100 Dinars, so that Backa hops of good middle quality were offered free Germany, duty unpaid, at about 25 RM. and even less (freight expenses of about 10 RM. included).

Agriculture in Jugoslavia has suffered immense losses by the cultivation of hops, considering that in the Wojwodina the cost price for hops amounts to about 1000 Dinars (74 RM.), and in Slovenia to about 1500 Dinars (110 RM.) per 50 kilos. There is further to be considered that the reduction of the acreage in Jugoslavia from 12000 hectares in 1928 to the present acreage of about 3800 hectares, for the moment reduces the wire installations and hop poles to no value extending over an area of 8000 hectares.

The Government of Jugoslavia, unable to lend a helping hand, advised limiting hop-growing to those districts where high quality hops might be cultivated, an advice widely followed.

Wojwodina: On account of the extraordinary heat and drought in July and August, causing red spider, the hop gardens in the Backa and also in Syrmia were severely damaged. Torrential rainfalls between August 20th and 25th came too late for destroying the red spider in good time, whilst the damp and warm atmosphere caused the rapid development of downy mildew which only in rare cases was combated by spraying. The cones, in general, were dwarfed, often discoloured, so that with the low prices and the miserable selling prospects, about 60000 cwts. remained unpicked.

The crop harvested may be estimated as amounting to approximately $35\,000$ cwts. Quality was about $10\,\%$ lighter than in the year before and was judged: $20\,\%$ first-rate, $50\,\%$ middle, $30\,\%$ inferior. The average yield was about 15 cwts. per hectare.

Slovenia: Picking proceeded from August 12th to September 1st, and, contrary to the preceding year brought in a heavy produce, rich in bitter substance, partly overripe and therefore of a deeper yellow than usual. Quality was judged: 15% first-rate, 55% middle, 30% inferior. About 5/10% remained unpicked. The initial prices were 750/800 Dinars per 50 kilos; later on prices sunk to 150/100 Dinars.

		Im	orts	Expo	orts
in the year	1926	1516	cwts.	62 008	cwts.
•	1927	2440	22	80630	••
	1928	1771	"	151160	"

France.

The growth proceeded without any hindrance. Spraying to combate downy mildew was done about twice.

In Alsace, picking began on September 2nd, under favourable weather circumstances and was ended by September 17th. In consequence of the low prices, about 5000 cwts. remained unpicked. The harvested produce was excellent as regards both ripeness and drying; the cones middle-sized; the average yield about 32 cwts. per hectare, each hectare stocked with 3000 or 3200 plants, mostly proven Spalt plants. Here and there the colour was slightly impaired by downy mildew. Quality was judged as follows: 30 % first-rate, 50 % middle, 20 % inferior.

· Burgundy: Picking began on August 15th and continued until beginning of September. There resulted an average yield of 24 cwts. per hectare with 3000 plants each. Serious endeavours are being made to improve the quality of Burgundy hops, the cones of which have a tendency to be loose-leafed. Burgundy carly hops, Strissel-Spalt and Rambervillers are considered the best sorts.

Department du Nord (Flanders): The picking lasted from August 29 till September 15; 25/30% remained unpicked. Downy mildew, combated by three sprayings, partly discoloured the cones while harvesting was already going on. On October 1st, 1929, a governmental decree restricted the growing of male plants, limiting 4 male plants to 4000 female ones.

On October 18 th, 1929, the Hop Growers and the Brewing Industry, by common accord, decided to recommend to Parliament an increase of the import duty on hops, from 125 to 200 francs per 100 kilos. In addition, the Chamber included hops into the so-called Cadenas law that affords Government the right to increase import duties without preliminary interpellating Parliament. But the duty of 125 francs being bound to the Franco-Czechoslovakian Commercial Treaty, Government does not for the moment intend any modification. The turnover tax on hops was reduced from 2% to 0,55%.

The reduced acreage, at present being of about 3300 hectares, from which, on basis of the last ten years' yield an annual average yield of 22 cwts. per hectare, a crop of nearly 75000 cwts. may be expected. This quantity is considered as being still too extensive unless a means of export on a larger scale should be found. The French brewers who set a high value on improving their beers in order to prevent foreign beer imports, are, in an increasing degree, buyers of the very best foreign hops.

Development of the prices: In Alsace, the prices set in at 200/250 francs; then they were slowly falling to 225/80 francs, in Burgundy from 100 francs to 30/50 francs, in the Department du Nord from 210/300 francs to 50/60 francs.

Import to	France	in	the	cal	ender years:	Export from	F	rance	in	tŀ	1e	calender	years:
1927					$48420 \mathrm{\ cwts}$.	1927 .						. 5152	20 cwts.
1928					39216 ,,	1928 .						. 3276	58 ,,
1929					41080 ,,	1929 .						. 3070)0 ,,

In spring, before and during the harvest, the plants suffered from fleas and downy mildew. Picking proceeded between August 15th and September 20th, in splendid summer weather. In all Polish hop-growing territories, the produce resulted about 10/15% lighter than in the year before, many cones being larger and grainy as a consequence of excessive manuring, so that they partly became discoloured while being picked.

In Congress Poland, where hop growing is done carefully, about 5% of the gardens were sprayed twice or three times. There, a hectare is stocked with 4000 or 4500 plants of which 60% are Auscha red vines which proved the most satisfactory of all, whilst vines of Old Saaz Red Hops (making up about 20%) afford richer yields; only 10% were Hallertau vines. 20% of the crop remained unpicked. Quality was judged: 20% first-rate, 35% middle, 45% inferior.

In Wolhynia, picking lasted from August 27th till September 20th., 20% remained unpicked. Quality was judged: 25% first-rate, 30% middle, 45% inferior. Downy mildew manifested itself on the cones, although it was not traced on the plants. Also in Wolhynia preference was given to Auscha plants (Semsch hops), 3000 plants per hectare.

Small Poland or Galicia: All the crop was gathered; but the cones while being harvested became discoloured. Quality was judged: 30 % first-rate, 60 % middle, 10 % inferior.

In Great Poland, in the district of Neutomischl, the greater part of the crop was picked. The produce was mostly fine in colour, and the cones were larger than usual.

The Government of Poland is solicitous about encouraging hop cultivation. By the concession of an export premium and by abolishing the turnover tax (up to now2%) on any transaction connected with hop export, it expects to increase the export trade. At Lublin, from September to October 4th, a Hop Fair took place, which is planned to be repeated every year. Export trade in hops was prejudiced by the cheap prices in the hop importing countries.

One third of the crop was destroyed by a violent storm in July. All the remainder was gathered and amounted to about 3000 cwts. The produce was of a rather rough quality. One fourth of the gathered crop is still unsold. As in the last two or three years, the picking costs were scarcely fetched. Hop-growing is being more and more abandoned.

		Im	ports	Expo	rts
in the year	1926	2950°	cwts.	$1652\hat{1}$	cwts.
•	1927	529 1	••	34317	22
	1928	3271	59	41960	11
	1929	5754	**	51004	

As to the hops grown in Bulgaria, Italy, Sweden etc., their quantities are too insignificant for figuring in public statistics. In Roumania the 1929 crop yielded 1123 cwts. on 107 hectares.

The fifth program established by the Soviet Political Economists for the space of 1928/1933, has set the aim of increasing the acreage of Soviet Ucraina to 6000 hectares and the crop to 45000 cwts. But already in the year 1928, these expectations failed to materialize. According to reports received, hop growing, mostly done by small farmers working individually for their own account, has been fast declining during the last two years.

The policy of taxes and low prices followed by the Soviet Government induces the farmers more and more to give up hop growing. In 1929, the acreage may be considered to have been smaller than in the two preceding years; but exact figures are not obtainable. There being no statistics, either of acreage or of crops, foreign trade cannot reckon with the Russian crop that always makes its appearance in the market unawares.

In the districts of Poperinghe and Alost, this country was struck in a particularly painful way by the hop crisis. In consequence of the decrease in the production of high fermenting beer in Belgium,

Poland.

Austria.

Russia.

Belgium.

Belgium.

the Belgian hops specially qualified for this beer could not find enough buyers, notwithstanding their low prices. The producers have decided to substitute, as far as possible, the Coigneau sort (80%) for the better sort of Groene Belle (20%) and to eliminate the male plants to a greater extent than heretofore. Great efforts will be required to save the endangered hop cultivation in the above named districts.

Alost: The growth was hampered by lice, drought, the red spider and to a small extent by downy mildew. In 1929, 4,8 kilos of green hops were needed to make up 1 kilo of dry hops, against 4,4 kilos in 1928. There are 2700 poles or 2800 plants per hectare in the few gardens laid out with wire installation. The average yield was about 1600 kilos per hectare.

In Poperinghe, 12% of the crop remained unpicked, being impaired by the downy mildew. The average yield was 2000 kilos per hectare. The losses endured by the producers, i. e. about 300 Belgian francs = 35 sh. per 50 kilos, induced the latter to root up more than 1/5 of the hop plants.

In Alost, the prices fluctuated between 260/325 b.fcs., in Poperinghe between 115/175 b.fcs. Quality was judged: Alost: 30% first-rate, 60% middle, 10% inferior; Poperinghe: 25% first-rate, 60% middle, 15% inferior.

				Impo	orts	Exp	orts
in	the	year	1927	$4017\bar{5}$	cwts.	16750	cwts.
		•	1928	57848	22	12800	72
			1929	57 541	,,	4 011	"

England.

An excessively dry summer and rain setting in beginning of August, in good time created the very conditions for bringing about an abundant crop. The downy mildew and mould manifested themselves but in rare cases, so the farmers had but few expenses for combating vermin or diseases.

Picking took place in fine weather, from September 2nd to October 10th. Most favoured were the hop-growing territories in Worcestershire and Herefordshire where the whole crop was gathered. Quality of these hops was judged: 40% first-rate, 50% middle and 10% inferior. Mathons and Bramblings (Goldings) are considered to be best as regards quality, whilst Fuggles, grown on 2/3 of the total acreage, are judged to be most productive. The prime qualities were in constant demand and were totally sold out at relatively good prices, whilst from the abundantly grown inferior qualities, in the counties of Kent and Sussex, large quantites are still available.

The average yield of the last ten years was 11,9 cwts. per acre = 29,9 cwts. per hectare, whilst in 1929, there resulted an average yield of 15 cwts. per acre = 37,6 cwts. per hectare. The cost price per acre with a yield of 15 cwts., from part of the producers is indicated to be £ 100, whilst in 1913, with an average yield of 7,4 cwts. per acre, it was no higher than £ 40.

Beginning of October, prices set in with £ 4.10.— to 7.15.— for first-class hops and with £ 2.10.— to 4.10.— for inferior and middle qualities. Whilst first-class hops have been able to hold almost their price level, inferior and middle qualities, making up 85% of the total crop, could be disposed of only at receding prices, and at present quite good quality may be bought at prices between £ 1 to 1.5.— such as a year ago cost £ 9 to 11.

Beginning of July 1929, the Hop Growers' Ltd. suddenly reduced the prices, they had established, by 50%, for the period of three weeks, in order to clear the stocks of 1928 hops. The remainders that were still existing were sold as manure after being rendered unfit for consumption, just as was done with the remainders in preceding years, so that at the beginning of the 1929 harvest, no stocks of former years were on the market.

In August 1929, after the Liquidation of the Hop Growers' Ltd. the free sale of hops was re-established after its suspension for practically 12 years. As any similar attempt intending to elude the unalterable laws of offer and demand by recurring to coercive measures, the co-operative sale enforced by the Hop Growers' Ltd. proved a failure, after 4 years' existence, which association as everybody knows, substituted the governmental hop control. We bring to mind the fact that in the course of theses years, several hundred thousand cwts. had to be destroyed, in order to render possible the price policy of the Hop Growers' Ltd. The heavy burden of this experiment was borne with admirable fortitude by the English Brewing Industry, for the purpose of promoting the national cultivation.

Already the first crop left to free sale proved that the English acreage stocked to a great extent with rich bearing inferior sorts, has remained too vast on account of the price policy of the Hop Growers' Ltd. The English Brewing Industry, which no later than in July 1929 had provided themselves with 1928 hops at half value, has bought about 75 % of the new English crop, viz. 300 000 cwts. plus 29 000 cwts. of Americans and 19 000 cwts. of Continentals, so that with the last year's stocks and the large quantities available on the English market, they may safely look forward to the new harvest.

In order to overcome the severe crisis at present affecting hop culture in England more than in other countries, considering that beer consumption in England as well as hop exports to Ireland are retrogressive, advice is given to reduce the acreage of round 24000 acres to about 17000 acres, to eliminate the inferior sorts, such as Tutshams and Tolhursts, and to substitute the open kilns by air drying, longe since used in other countries.

Imports: Exports:

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      1st Sept. 1927—31st Âug. 1928
      97247 cwts.
      1st Sept. 1927—31st Âug. 1928 29482 cwts.

      1st Sept. 1928—31st Aug. 1929
      87769 , 1st Sept. 1928—31st Aug. 1929 17717 , 1st Sept. 1929—31st Aug. 1930 19698 , 1st Sept. 1930 19698 , 1s
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The growth of the hop plants proceeded in great heat and drought. In Oregon the plants suffered from vermin, which was combated by six sprayings. Damages caused by mould were reported from Sonoma and Oregon. Picking began about 15th August and continued until about September 20th. Only small quantities remained unpicked, in Oregon about 12%. Quality was by far below the average quality of the last few years. The hops harvested were mostly of inferior quality, the cones smaller than usual and less fine in colour. First-rate and good middle hops made 30% of the crop in Yakima, 40% in Sonoma and 35% in Oregon. The average yield was said to be about 1200 lbs. per 1000 plants.

The following seedlings are preferred: the English Cluster, the Early Cluster, the Red Vine and the Fuggle. The great number of varying qualities within the different sorts resulted in unsatisfactory trade conditions, there being a lack of really first-class hops.

The initial prices set in with the harvest at 10/15 c. at the producers' and declined to $6/8^{1}/2$ c. per lb. later on they rose again to $8/10^{1}/2$ c. Last quotations are from 10/14 c.

The stocks of 1929 hops, end of May were stated to be: in California 20000 bales of 185 lbs. each, in Oregon 18000 bales of 190/200 lbs. each, in Washington 2000 bales of 200 lbs. each; further old hops 6500 bales.

In the U. S. A. the acreage exceeds the demand and has to be reduced in proportion to the latter, the cost of production being considerably above the average prices paid.

	Imports:	Exports:
1st July 1926—30th June 1927	. 470286 lbs.	13369268 lbs.
1st July 1927—30th June 1928		11812434 lbs.
1st July 1928—30th June 1929		8836240 lbs.
1st July 1929—31th May 1930	864025 lbs.	6762764 lbs.

In Canada, hops were formerly grown in Ontario, Quebec, and in the maritime provinces. At the present time, hop growing is almost exclusively limited to British Columbia in the Fraser Valley (Chilliwack, Sardis and near the Lake of Sumas).

As to both quantity and quality, the 1929 crop was superior to that of 1928, although it has suffered from downy mildew.

The increasing beer production in Canada reduces exports and increases imports, in which latter the U. S. A. figure with 60%.

Import to	C	an	ıad	la	in	tl	he	ca	ıleı	ndar year	' 8	Export from	Car	180	la	in	ı t	he	c	alendar	years
1927										1961797	lbs.	1927 .	4.							709 038	lbs.
1928										2396603	22	1928 .								487850	22
1929										2822960	••	1929 .								295802	22

The following preliminary sales of 1930 hops have come to our knowledge; all the prices are to be understood per 50 kilos:

In perusing the following figures it must be considered that they show only rough estimates, rather too high for our opinion than too low. We are submitting them merely in order to afford the reader an opportunity of judging for himself the reduction of the acreage.

Germany: 15%

Czechoslovakia: 12% to 11751 hectares.

Jugoslavia: In Wojwodina 50/60% of the 1929 acreage of 7000 hectares have been ploughed up. Furthermore 10/15% of the plants were not tied up and other products grow in these gardens. The cultivated acreage in Wojwodina is estimated about 1500 hectares. Old farmers have reduced the acreage the least. Slovenia: 25%.

Austria: 20%. Poland: 28%.

France: In Alsace-Lorraine of 2824 hectares about 815 hectares were rooted up, i. e. 28%; 145 hectares without removing the poles or wire installations. In Burgundy and the Department du Nord an average reduction of 30% is reckoned with.

Belgium: 23 %

U.S.A.

Canada.

Preliminary sales.

Decrease of acreage.

Russia: A further reduction is to be reckoned with, but impossible to be statistically determined. England: about 15%.

U. S. A.: 20% (California 40%; Washington 20% and Oregon 15/20%).

Canada: British Columbia has been reduced leaving about 900 acres.

World's Hop Consumption 1930/31. In the following statement we bring the figures of the presumptive consumption of hops in $193\,0/31$.

World's Hop Consumption 1930/31.

	<u> </u>	,	
	I3stimated Beer-Production 1930/31 hectolitres	Dose of hops per hectolitre in pounds of 1/2 Kilo	Hop Consumption in 1000 cwts, of 50 Kilos each
Germany Austria and Hungary Czechoslovakia Poland and Danzig Roumania, Jugoslavia Baltic States Balcan. France. Belgium Netherlands Norway, Sweden Denmark Switzerland Spain, Portugal, Italy Russia Continent Great Britain Irish Free State Europe	57.000.000 5.900.000 12.200.000 2.550.000 1.500.000 600.000 190.000 15.770.000 2.300.000 2.560.000 2.120.000 2.600.000 1.900,000 2.500,000 127.690.000 31.800.000	0,47 0,52 0,60 0,65 0,60 0,55 0,50 0,40 0,45 0,43 0,43 0,43 0,50 —	267,90 30,68 73,20 18 9 3,30 0,95 72 71,05 9,89 11 6,99 10,40 9,50 11,50 605,36 333,90 38,50
United States of North America Canada Central America South America Eastern Asia India Australia and New Zealand Africa World's consumption	162.990.000 8.000.000 2.800.000 1.260.000 5.000.000 1.700.000 4.000.000 550.000 186.415.000	0,75 0,55 0,60 0,50 0,90 0,90 0,80	977,76 120 21 6,93 30 8,50 1,03 36 4,40 1,205,62

Stocks of the 1929 crop.

By end of June 1930, the stocks of fine quality hops left over from the 1929 crop in Central Europe viz. Alsace, Austria, Czechoslovakia, Germany, Jugoslavia, Poland and Russia were only insignificant and supposed to exceed but little 30000 cwts. The total quantity harvested in these countries amounted to some 830000 cwts. The world's need in fine quality hops, that probably rose somewhat in consequence of the cheap prices, may have been little over 600000 cwts.; wherefrom may be concluded that almost 200000 cwts. were bought in excess of a year's consumption. These are to be added to the stocks available in August 1929.

The stocks of the Breweries in England are estimated at a third over normal; to these the unsold market stocks must be added. In the middle of June these were estimated 60000 cwts., so that the English Brewing Industry shows a certain indifference as to the result of the coming crop. In the U. S. A. the quantity of 1929 hops is stated to be about 50000 cwts.

The winter having been mild, the work in the gardens was able to be started early. May was cold and rainy, so that in this period of slow growth damages caused by fleas were noted. Since the beginning of June, the weather has continually been very hot and dry, so that the plants developed rapidly on a soil sufficiently watered by the rainfalls in May. Though from some districts information has come in about unequal development of the plants, the appearance of downy mildew and aphids, sporadic damages from drought and heat, the present conditions of the hop-gardens in Central Europe may be looked on as being satisfactory. In England, the present prospects are for a good medium crop.

The outlook in U. S. A. is less favorable. The new crops in Western Washington Oregon and Canada are more or less badly hit by downy mildew, which has caused a rapid advance in prices of about 5 c. per lb. in all grades.

Joh. Barth & Sohn.

Growth of the new plants.