The value of logs depends not only on size but also on the amount of defect. The amount of defect has a marked influence on the amount of lumber produced, but little on its quality. Therefore no correction is necessary if the logs are sold on a net scale basis. If, however, they are sold on a gross scale basis, a percentage reduction on their value equal to the percentage of defect should be made.

One of the greatest obstacles in the way of selling logs on a grade basis is the fact that there are no standard log grades. In the absence of log grades and with the hope of partially overcoming these obstacles, the following simple quality classification for logs, based largely on the position they occupied in the tree, is offered: (1) Butt logs, (2) smooth logs, and (3) top logs. The first would include all butt logs 10 inches or larger, free from limbs or knots. The second would include all other logs 8 inches or larger that contain not more than one knot on the surface for every 4 feet in length of the log. The third would include all the other logs. They would be relatively coarse and knotty, and usually the top logs of the trees.

Grades Applied at a Southern Mill

The application of these grades was tried out by the Forest Products Laboratory at a southern mill cutting second-growth loblolly pine. Based on 1928 costs and values the operator could make a fair profit by paying $14.26 for butt logs, $7.08 for smooth logs, and $2.50 for knotty logs per thousand board feet, Doyle scale, with 3.5 per cent deduction for defects. Based on the percentage of the different types of logs brought to the mill the flat rate would have to be $9.71 per thousand, Doyle scale, to yield the same return to the farmer on his timber. If the farmer could dispose of his knotty logs elsewhere, the buyer could afford to pay $10.60 for butt and smooth logs. The figures quoted should only be used as a guide, for local conditions might lower or increase these figures considerably. For example, the price of pine logs sold at the mills in Arkansas as given by United States Department of Agriculture Statistical Bulletin No. 32 gives an average price of $10.43 with the individual sales varying from $8 to $18.

The spread in value indicated above between butt logs, smooth logs, and knotty logs holds fairly well in other species also. In northern red oak, for example, with a 12.5 per cent deduction for defects, butt logs are worth $27.90, smooth logs $18.30, and knotty logs $12.50; and in sugar maple with a 5.3 per cent deduction for defects the butt logs are worth $21 and the other logs about $11.20.

Some appreciation of difference in log qualities will help the small wood-lot owner to obtain a fairer price for his timber, but he must not forget to find out before he cuts his timber what the buyer will pay, what size and length he will accept, and how defective the logs may be.

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MEAT Prices at Retail Follow the Trend of the Livestock Market

During 1931, when prices of all agricultural commodities were falling rapidly, the Department of Agriculture received many inquiries as to whether the lower prices received by livestock producers were being reflected in retail meat prices. In response to these many inquiries, the depart-

ment analyzed retail meat prices at New York City. The assembling of adequate and comprehensive data on retail meat prices to present a true picture of the retail market throughout the country is a difficult task, since meats vary widely in grade and are sold in various styles of cuts in thousands of stores with different kinds of customer service. This report, therefore, deals with only one grade of carcasses sold at New York by stores on a cash-and-carry basis with some delivery and credit service.

The retail meat prices were collected twice a month from the retailers and the mean of the range of the quotations as reported for each cut was computed and used as the average price for that particular retail cut. In the case of beef, prices were collected on the six more important cuts, i. e., porterhouse, sirloin, and round steaks, and rib roasts, chuck roasts, and plate beef; for lamb, prices are for the leg, loin, and rib chops and stew meat. In neither case do the above cuts comprise the entire carcass, consequently prices were calculated for the remaining cuts, i. e., flank, blade rib roast, brisket and shoulder of beef, and square chuck of lamb, by using a retail price differential more or less common to the New York retail market.

Method Used in the Analysis

The prices for the 10 cuts of beef were then used for computing a weighted composite retail price per pound of the total salable beef in a carcass, making allowance for the usual trimming and boning done by the retailer. Based on numerous tests in which cuts were given a fairly close trim, the salable beef represented about 79.75 per cent of the carcass weight, the remaining 20.25 per cent represented shrinkage, fat, and bone trimmings. The same procedure was followed in computing the composite retail price of lamb, and in this case, the salable portions equal 97.5 per cent of the carcass weight.

Having the composite or average retail price of cuts from a Good grade steer carcass, based upon the semimonthly and monthly retail price quotations, the total retail value of a carcass was computed. The packers have given an average dressing percentage of 58 per cent to Good grade steers; thus a 1,000-pound steer will produce a carcass weighing 580 pounds, and from this carcass the retailer will be able to sell 462.5 pounds of trimmed retail cuts. Multiplying this weight, 462.5 pounds by the composite retail price, gives the total value of the retail cuts from a 1,000-pound live steer. To determine whether or not the price reduction of the live animal is reflected in the retail prices, it is necessary to compare the total value of the live steer with the total value of the retail cuts, because the prices of some individual cuts react just the opposite to the live steer market or the wholesale meat market at certain seasons of the year. Without taking into consideration the prices of all cuts from a carcass, the retail prices of only a few cuts may be very misleading and a true condition of the retail market can not be visualized from them.

Basis for Steer Values

In computing the value of a 1,000-pound Good grade steer, the average monthly quotations of the Chicago market were used, whereas the value of the 580-pound Good grade steer carcass was based upon the average monthly quotations of the New York wholesale meat mar-

ket, and the retail value was based upon the composite retail price computed from the retail quotations at New York. In the case of lamb, the same procedure was used except that the carcasses were taken as 48 per cent of the live animal, thus giving 480 pounds for each 1,000 pounds live weight, and 468 pounds as the weight of the trimmed retail cuts.

The accompanying charts (figs. 86 and 87) illustrate the monthly fluctuations in the value of the live animal, carcass, and retail cuts for the years 1929 to 1931.

The average value of a live steer for 1929 was $140.30, and for a carcass, $125.40, whereas the retail cuts gave a gross return to the retailer of $188.47, in comparison with returns during the first 10 months of 1931, when a steer realized $89.80, or a reduction of $50.50; carcasses

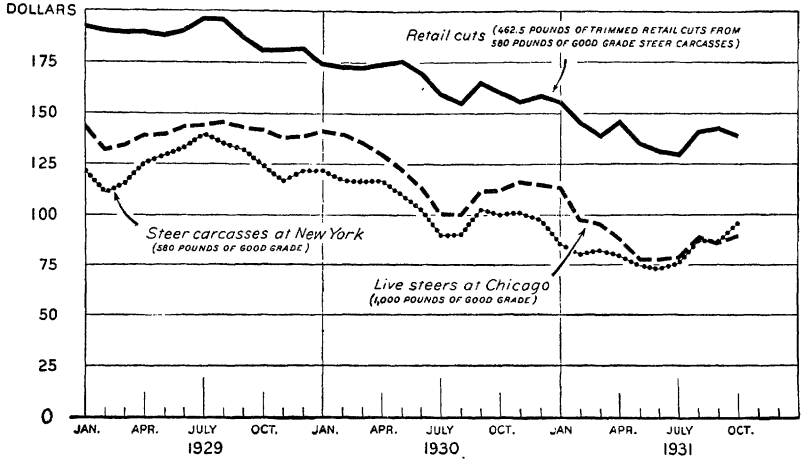

FIGURE 86.—Total value of live beef steers, carcasses, and retail cuts

$81.20 or a drop of $44.20; and the retail cuts $141, a decrease of $47.47. Comparing returns in 1930 with those in 1931, steers declined $30.20, carcasses $24.10, and retail cuts $25. In both cases there is evidence that the reductions that the packer allowed the retailer were passed on to the consumer. The reductions that took place on the live animal appear not to have been applied entirely to the carcass, consequently the reductions for the live animal and for the retail cuts are not comparable.

Margins Remain About Constant

The margins or the differences between the carcass value and retail value seem to remain about constant with some seasonal variations and a slight lag at times because of the lack of immediate changes by the retailer in reflecting the carcass changes in the retail cut value. There also appears to have been a general trend on the part of the retailer to narrow the margin during 1931 as compared with the margins the two previous years.

When considering lamb for the years 1929 and 1931, similar facts are observed. A comparison of figures for 1929 with those for 1931 shows a decrease in value of 1,000 pounds of live lamb of Good grade from $143.60 to $75.10, a decline of $68.50. Carcasses of this same grade

declined from $131.20 to $81, or $50.20, whereas the retail value dropped from $182 to $121.10, a decline of $60.90. Thus the retailers were allowed a reduction of $50.20 on the carcasses but lowered the value of the trimmed retail cuts by $60.90, apparently allowing the consumers a greater saving than that to the retailers by packers. For the years 1930–31 live lambs per 1,000 pounds had a reduction of $21.40, carcasses were reduced $18.60 for every 480 pounds, whereas the value of the 468 pounds of retail cuts was reduced $24.30.

The data presented here in chart form show that in general the value declines in the cattle and lamb markets in the last three years have been reflected in the wholesale meat market, although not completely so, because the value of the by-products have also been reduced and these outlets have absorbed part of the livestock value reductions.

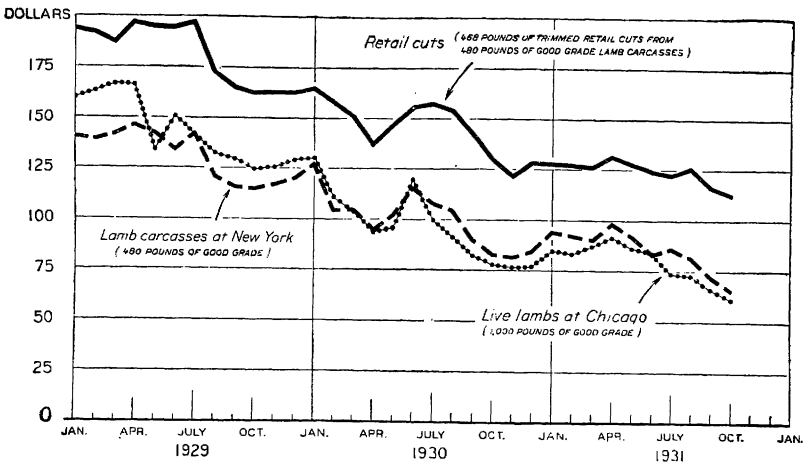

FIGURE 87.—Total value of live lambs, carcasses, and retail cuts

Although there is a tendency for the retail meat values to change more slowly than the carcass values, the reductions given by the packer are eventually passed on to the meat consumer.

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MEXICAN Bean Beetle Approaches Northern Limits of Distribution

Ten years after its discovery in the eastern part of the United States the Mexican bean beetle has apparently approached the northern limits of its distribution, at least from an economic standpoint. The new territory invaded during 1930 was relatively small, as indicated in the accompanying map. (Fig. 88.) No new States were reached and new records of distribution were obtained from only five States—South Carolina, Connecticut, Massachusetts, New York, and Michigan—the newly infested areas in the last two States being very small. During 1931 two new States, Vermont and Rhode Island, have been invaded, and some new territory has been infested in Indiana, Kentucky, and Georgia.

It is probable that the severe drought of 1930 may have retarded spread toward Illinois and farther into the lower peninsula of Michigan. However, Massachusetts, Connecticut, and New York were not so severely affected by the drought and it is believed that the spread