

year and die. In this class we find the common weeds, such as pigeon grass, pigweed, lamb's-quarter, wild oats, wild mustard, corn cockle, wild buckwheat, cockle bur, French weed, and kinghead or ragweed.

Biennial weeds are those which require two years in which to produce seed from seed. The seed germinates, and the first year simply a rosette of leaves is produced. The root lives over winter, just as a clover root does. Seed is produced the second year, and the whole plant dies, root and all. This class of weeds is well represented with us by the bull thistle and burdock.

Perennial weeds are those which live from year to year, usually by underground stems or rootstalks. In this class we find such weeds as quack grass, Canada thistle, perennial sow thistle, morning glory and sheep sorrel. These weeds, like others, start from seed, but the root or underground portion is permanent, and unless destroyed in some way, sends up new shoots each year in its attempt to produce seed. These weeds not only persist in growing when prevented from seeding, but spread, and often quite rapidly, by means of their underground rootstalks.

Rotation beats them all.

Terrible Conditions of English Market Men.

A representative of the London, Eng., Tribune, who made inquiries on the subject, found that hours of work for the market carmen, which are now regarded as quite ordinary conditions, include:

- Carrier-van drivers, 24 hours.
- Market-garden drivers, 15 hours a day.
- Parcels, delivery men, 15 hours a day.
- Milk-cart drivers, 85 hours a week.
- Mail-cart drivers, 90 hours a week.
- Omnibus drivers, 90 hours a week.

With the exception of the omnibus men, these terribly long hours were rewarded with a wage of but a few pence per hour, usually about half of what is regarded as the minimum fair wage for an unskilled laborer.

A PITIABLE STORY.

Here is a pathetic story of a man who for years has driven to London with market-garden produce. He leaves his home, 18 miles from Covent Garden, about ten at night, when the roads are in good order. In winter, when slippery places may be expected, he starts an hour or so earlier. Through the whole of the night he drives his team, sometimes of three horses, and about five o'clock occupies his stand near the Floral Hall, and begins to sell his produce. Sometimes he will be fortunate enough to get rid of his load by ten o'clock; frequently it will be noon before he is at liberty to start on his homeward journey. He will get back to his starting-point between five and seven o'clock in the evening, and, more often than not in the busy season, at this time of the year, will be on his way to town again at midnight, without having taken off his clothes. In this way he has often performed six of these journeys in a week, being actually at work 105 out of the 168 hours.

For that awful spell of toil in six days, he receives the sum of 21s., which works out at less than 2½d. an hour. Even from that inadequate sum he has to pay 2s. 6d. for his wooden, two-roomed tenement, and 6d. a week for milk. So that with 18s. he has to feed and clothe himself, his wife, and three children.

Nor is his a singular story. His hours may be a little longer than some others of his class, but from each of the Home Counties, night by night, these carters occupy the roads, and the publicans on the various routes as well as the police officers in the suburbs of London, can tell of the suffering of men and horses.

"When I kept a 'pull-up' house in the Old Kent Road," said the witness, "I have seen a horse absolutely fall down asleep in the shafts of a cart, and then found the driver asleep in the body of the vehicle."

"If we followed our instructions implicitly," a police officer declared, "and arrested all the men we saw asleep while in charge of a horse and vehicle, the local police would have nothing to do but provide them with accommodation. So long as they are in the quiet roads, and there is not much traffic about, we seldom take any notice."

A REAL SOURCE OF DANGER.

But it is not only the inhumanity of the business that concerns the public. These exhausted drivers, asleep in their vehicles, are a very real danger and inconvenience.

Nor are they alone in the long hours and low wages, the night travelling, and the snatched sleep. From even further afield there come the carts of the country carriers, the vans and wagons of the farmers, and the sheep and calf-laden vehicles of the stock-breeders, all travelling by night or in the early morning, and most of them having spells of continuous duty, lasting as long as 24 hours on end.

County by county, here are some of the averages of hours worked and wages paid, as given by carters,

taken haphazard in the London markets or on the roads leading thereto:

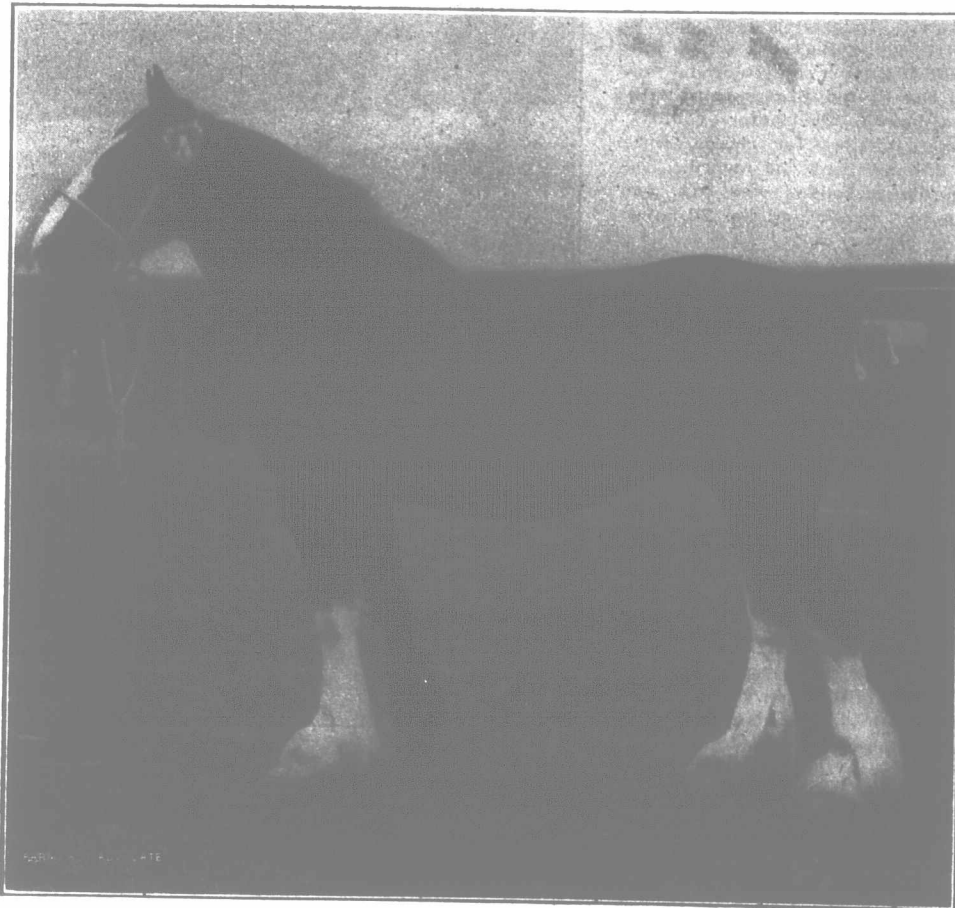
- Hertfordshire.—24-hour trip, 8s.
- Hertfordshire.—78-hour week, 20s.
- Oxfordshire.—90-hour week, 18s.
- Oxfordshire.—86-hour week, 20s.
- Oxfordshire.—79-hour week, 14s.
- Essex.—105-hour week, 21s.
- Essex.—94-hour week, 18s.
- Buckinghamshire.—85-hour week, 20s.
- Surrey.—78-hour week, 21s.
- Kent.—90-hour week, 20s.

The employers say they are obliged to work the men these long hours because they cannot get laborers, and the produce must be despatched to market immediately after picking. The answer of the men is that the laborers would stay in the villages if they could earn a reasonable wage for a moderate week's work, and that it is the excessive toil demanded of them that sends so many to the towns, where the average carman in the local authorities' employ, or driving for manufacturers and shopkeepers, are not so over-worked, and are, at any rate, for the most part sure of their Sunday off duty.

THE DAIRY.

A Scrap Over the Milk Question.

The subjoined clipping, from the letter of a correspondent in Hoard's Dairyman, will carry folks back to old-home scenes, till they fancy they hear the conversation and see the mother bending her back over churn handle and butter bowl:



Cedric Princess.

(Clydesdale mare; first and champion, Royal Show, 1906. Sire, Baron's Pride. Owner, Thos. Smith, Chester.

"We had a family scrap at our house this morning," said a sprightly girl while making a call at a neighbor's. "Pa wanted to send the milk to the creamery, and Ma wanted to keep on making butter at home. It ended in a compromise, half the milk being sent and half kept at home for Ma to fuss over. She says she wants to eat her own butter and know how it is made. Besides that, she thinks they don't give fair, returns from the creamery, for it always appears to her that she gets more butter out of the milk than they do."

"But the way Ma fusses over the butter is enough to drive you wild! You know, our well is quite a way from the house, and Ma pumps six to eight pails of water and lugs down cellar every time she churns. I don't know what under the sun she does with all of it, but she uses it in some way. And she won't let any of us help her, even refuses to let us turn the churn handle."

"Now, the rest of us know well enough that it's all nonsense for her to do it. We could eat creamery butter as well as other folks. If it tastes good and looks clean, I don't care how they make it. Ma says, too, that the milk we get back ain't fit for the calves to drink. So, taking it all around, we have big times over the cows. Pa says he's going to sell every one of 'em. But I guess he won't do that."

Separating Cream.

The following points are included in the Instructors' Leaflet issued by the Ontario Department of Agriculture and the Dairymen's Association of the Province:

The day is past for the use of the shallow-pan system for creaming milk. If you have not a separator, then use the deep-setting system. This demands an abundance of cold water, and a liberal supply of ice should be provided. The separator requires constant and careful attention. First, it must be placed on a firm foundation amid clean surroundings, well ventilated and well removed from stables and bad odors of all kinds. The milk should be run through it immediately after being drawn from the cow. Thoroughly clean the separator after each skimming, taking the bowl apart, washing, scalding, and leaving to dry before again putting together. Clean the separator as soon as possible after using, as it washes easier, and is less liable to contaminate the next batch of cream. In washing a separator bowl and its parts, follow the directions already given for the washing of dairy utensils. Do not heed the person who advises washing the separator only once a day or twice in two days.

Put a quart of warm or hot water in bowl before starting to separate. This helps the process of separation, prevents cream from lodging, cleans out any impurities, and warms up the bowl. Speed the handle to the number of revolutions indicated, or three to five revolutions more to get a cleaner skimming and richer cream. Have the speed regular and uniform.

Skim each milking as soon as milked. There is additional loss in the skim milk, more work, and greater trouble when saving one milking over and skimming only once a day. The milk has to be cooled to keep sweet until skimmed, and then warmed again to get a thorough and clean separation. The additional heating and cooling tends to deterioration in quality of cream.

Cool the cream as it comes from the separator, or immediately afterwards, to a temperature below sixty degrees, and keep it there until called for, not mixing the different skimmings until all is cooled. Remember never to mix cold and warm cream.

Provide a special box or tank for holding the cans, of cream, and keep cold water and ice always around them, having the water in the tank to come up as high as the cream in the can.

Cream testing 80 to 85 per cent. fat gives better satisfaction to both patrons and maker. It will keep sweet longer, there is less bulk to look after, a larger yield of butter is secured, and more skim milk is kept on the farm. Sweet, fresh cream, of uniform quality, without bitter or other undesirable flavors, will be

found most satisfactory to all concerned, and the patron will be repaid many times over for his extra trouble. Do not be misled by the belief that cream slightly sour will show a higher test, and thus give you larger returns than sweet cream. Deliver your cream sweet, and see that the other producers do the same.

Variations in the test or richness of cream may be owing to numerous conditions: Changes in temperature of milk when separating, changes in the speed of the separator bowl, variation in the amount of milk running through the separator in a given time, the amount of water or skim milk used in flushing out the bowl after separating, changes in the richness of milk, seasons of the year, lactation period of the cows, etc.

A thin cream may be obtained by too slow a speed, too heavy feed of milk into the bowl, too low a temperature of the milk, too much water or milk used in flushing out the bowl, or the regulation of the cream or skim-milk screw. A rich cream will be obtained by increasing the speed, reducing the flow of milk and raising the temperature.

Conclusions.—Flush out all bearings of machine once per week with kerosene; do not allow too much oil to run in bearings, just enough to lubricate well. Do not leave spilled milk or cream around machines, but wash it up at once. It is business suicide to send good cream one day and poor the next. It means loss of trade and reputation. The flavor of the butter will be the same as the cream from which it is made; there-