often as necessary to supply

Under present-day sanitary

production practices and with improved refrigeration units in

general use on the farm, in milk

plants and wagons, in stores and homes, milk can be kept sweet

for four or five days. Milk is

promptly cooled after it is

drawn from the cow on the farm

and is kept at a temperature low

enough to retard the growth of

bacteria from the time it leaves

the farm until it reaches the

consumer's table, excepting for

a thirty-minute period while it

is being held at a temperature

of 145 degrees Fahrenheit in the

Beginning two years ago last

December Mayor Fiorello H. La

Guardia jumped into a cash-and-

carry milk marketing experi-

ment in New York City. The

city brought milk into ten loca-

tions by trucks, offering bottled

grade B milk at 9 cents a quart

-2 cents a quart lower than the

regular price anywhere else.

This was the beginning of a

municipally sponsored plan in

coöperation with independent

companies to drive down the

price of 3,500,000 quarts of milk

process of pasteurization.

wholesome milk.

The Graphic Laboratory Mostly About Dogs of Popular Science

Canned Milk Cuts Sale of Fluid

By FRANK RIDGWAY

PROCESSED products made from whole mile come boomerangs in the dairy industry. They are now pushing down the price of fluid

More milk is being produced-the production per cow is the highest in ten years. And more milk is being consumed, but not as it comes from the cow. The use of fluid milk-unprocessed except for pasteurization-is decreasing. Consumption of evaporated and powdered milk is increasing.

In Chicago fluid milk is going to consumers more and more over the cash-and-carry route through retail stores and less and less over the wagon route.

These facts tell what has been happening: During the last seventeen years the per capita consumption of evaporated milk has more than doubled. Less than 10 pounds per person was used in 1925. Today nearly 15 pounds of evaporated milk is being consumed per person annually. The annual per capita consumption of fluid milk in cities and villages of the United States dropped 4½ gallons during the five-year period ending in 1934. That year fluid milk consumption per person was 36 gallons, increasing to 38 gallons in 1936. It continued to go a little higher in 1937 but fell off again last

Edible milk by-products can be packed in distant dairy sections and shipped across the continent. They are not subjected to rigid inspection required of fluid milk. It is estimated that in 1937 it cost the average farmer in the restricted Chicago milk shed approximately \$1.72 a hundred pounds to produce milk for which he received \$1.93 a hundred. Approximately 1,300,000 quarts of fluid milk are sold to Chicago's three and a half million people daily. A similar amount is consumed as cream and other dairy products.

Production costs are held up by the city consumer's demand that herds be healthy and milk be handled under a system of

high standards of sanitation. Local dairymen shared their

Gee Whiz, Mister

... I JUST GOTTA HAVE

VITAMIN D

Red Heart Dog Biscuits Are Rich

in This Essential Element!

CEED your dog Red Heart 3-flavored

Pog Biscuits and watch him thrive! For these quality biscuits not only taste

better (beef, fish, and cheese flavors in

every package), but they're rich in essential vitamins and minerals your

dog needs.

Made from 24 wholesome ingredi-

ents to promote normal growth and development, Red Heart Dog Biscuits contain such elements as cod-liver oil,

Fleischmann's Irradiated Yeast, and

many others that make up an econom-

they abound in the sunshine Vitamin D, help remove tartar, and provide

vigorous gnawing exercise. Your dealer has Red Heart Dog Biscuits, kibbled or

heart-shaped-or he can order them

Send for FREE Booklet

They're grand for dogs' teeth, since

ical, balanced diet.

for you. Insist on them!



Bricks of dried milk being used as fuel on a regular run of a Chicago-Florida train. The two-ton load carried the train twenty-six miles. Coal was used from then on.

the federal government more costs and for indemnities paid pay a union wage scale. farmers for condemned animals. More than three and a half million animals were slaughtered. Today every state excepting California is on the federal government's modified accredited list, where the percentage of infection in cattle has been reduced to ½ of 1 per cent.

Legalizing the sale of beer five years ago caused much of the drop in consumption of fluid

been a decline of 4,120,000 pounds a month in the farmers'

Families on relief are being condensed milk by the govern-

part of the heavy cost of freeing tors' milk dollar paid out in variherds of tuberculosis. The na- ous ways during May, June, and tion's eradication program cost July of 1937. They represent the breakdown of the dollar rethan 350 million dollars in test ceived by the distributors who

MILK DISTRIBUTOR'S DOLLAR

								r	е	L	C	entag
Milk cos	st, f.	0.	b		ci	ty			*			43.1
Labor co	osts.											44.8
Repairs												1.2
Deprecio	ation	١.										1.9
Bottles,												4.1
Taxes a	nd 1	ic	en	86								3.0
Balance	for	a	dn	ii	ni	st	rc	zi	i	V	0	
and a	11 0	he		-	XX	20	n	9	•			1.9

The labor cost is made up of It is estimated that there has the following items: Bottling plant wages, 3.2 per cent; delivery wages and commissions, 36.3, market for milk in Chicago and office, stable, and platform wages, 5.3 per cent. Most distributors say there were no net given butter and powdered and profits left after all expenses were paid.

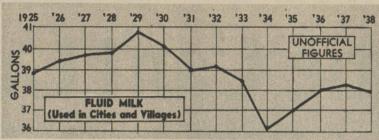


Chart showing decline in use of fluid milk by years.

ment. This works against the effort being made to maintain a proper price level for farmers. It puts the government in the position of encouraging the consumption of these products, educating consumers to use more evaporated and powdered milk instead of fluid milk.

Farmers in the Chicago dairy territory now are getting 53 cents a hundred pounds more for milk sold as fluid milk than they do where it is processed and sold in powdered or condensed form.

Fluid milk consumption follows trends of employment. The taking of millions of workers off the employment rolls in recent years is resulting in a reduced demand for fluid milk.

Consumption of fluid milk in Chicago is also slowing up because of increased costs of distribution in proportion to farm and retail prices.

On May 1, 1937, Chicago milk wagon drivers, under the terms of a three-year contract, obtained an increase in their base wage from \$45 to \$48 a week, plus commissions. They are now receiving the highest wage of any milk wagon drivers in the country. Shortly after the driv-'ers' increase was granted the farm price was cut and distributors reduced the retail price of fluid milk.

The Chicago milk distributors' costs show that they pay out of every dollar they receive 44.8 cents for labor. New York distributors pay 26.16 cents out of their dollar for labor. The cost of the milk as it comes from the farm, f. o. b. Chicago, amounts to 43.1 per cent, or 1.7 per cent less than is paid out for bottling and handling, including wagon drivers' wages and commissions, and office, stable, and platform

These figures, included in the following summary, are the percentages of the Chicago distribu-

EVAPORATED MILK Chart indicating rise in use of evaporated milk.

resulting in the retail prices of milk being held up, consumers turned more and more to retail stores for their fluid milk. Ten years ago approximately 80 per cent of the fluid milk sold in Chicago was delivered in wagons and trucks direct to homes, while consumers bought the other 20 per cent in stores. Today only about 54 per cent of the milk reaches homes over the back-door delivery route and 46 per cent through 27,000 stores of various types.

Chicago distributors receive an average of 10.39 cents a quart for all fluid milk sold. This includes the milk delivered direct to homes at 12 cents a quart and milk bought by stores at 81/2 cents a quart to be resold to consumers at 10 cents a quart.

The whole system of selling milk may be revolutionized through the use of a new method of keeping milk sweet at room temperature for as long as two or three months. The process involves the adding of a small amount of hydrogen peroxide and potassium iodide to the milk. This reduces the heat requirement for pasteurizing from 145 to 131 degrees Fahrenheit.

This new method would give encouragement to the proposal to deliver milk in Chicago direct to consumers under a stagger system. Instead of making daily stops at homes the wagon or truck driver would call every other day, twice a week, or as

With relatively high wages brought to the Jamestown colony three and a quarter centuries ago.

Old Brindle, with a beginning that has been traced back more than 11,000 years to the Libyan desert, is almost forgotten. Farseeing breeders have replaced her. In stanchions and stalls of their barns are the modern Brindles with such aristocratic breed names as Guernsey, Holstein, Brown Swiss, Jersey, and Ayrshire. These ruminating laboratories transform the grass and the grain of the farm into pure, wholesome milk.

The milk when it comes from a healthy cow is clean, and the big task is to keep it pure.

Pioneers who knew the chalky appearing fluid from which they could get cream, butter, and cheese would be surprised at the multiplicity of products that come from milk. It is now condensed or reduced to powder so that it can be sold in cans and packages over the grocer's counter. Many additional articles of food are made from milk, and nonedible products including ornaments, buttons, vanity cases, cigaret holders, lipstick containers, dominoes, wall paper, book bindings, knitting needles, poker chips, beads, buckles, combs, and synthetic fabric resembling wool. Casein, which comes from skim milk, is used in chemical sprays and in plywood for airplanes. From the whey of milk come lactic acid, sodium lactate,

How Breeds Compare in Popularity

OG FANCIERS in America and England are rather fickle about the various breeds which get their especial attention.

A comparison between the breeds that have had their ups and downs in England and those which have risen to the heights or gone into near oblivion in America in recent years presents striking evidence of how the public fancy for breeds changes. For example, when we compare the registrations in England during the pre-war years of 1911, 1912, and 1913 with those of last year we find nineteen new breeds which have caught the fancy of English dog lovers. Some of these are popular here

America's fa-

vorite terrier

breeds for

years.

(Tribune

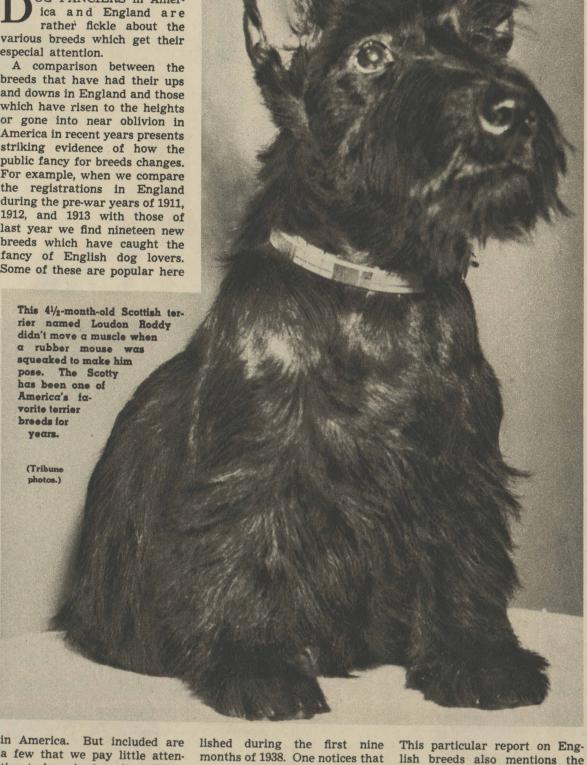
consumed in New York daily. There was trouble with the unions and the plan was dropped. Efforts are now being made to establish a farmer-consumer cooperative system of selling and distributing milk in New York.

The storekeeper agrees to sell for the coöperative on an agency basis, receiving so much a month for handling it instead of profiting by each bottle sold. The consumer is given a cap ticket which he is to save so that he can share in any earnings. The farmer is supposed to get two-

thirds and the consumer one-

third of the profits. Revolutionary changes that are now under way in the marketing and distribution of milk are made possible through scientific discoveries and development in the production of milk from healthy cows, the mechanical separation of cream, the testing of the butter fat content, the pasteurization of milk and modern refrigeration. Markers along Brindle's path

tell of the progress of milk all the way back to the first cow



a few that we pay little attention to here in America. When we look at the "much more poplish springer spaniels, cairns, wire-haired fox terriers, Scottish terriers, chows, and Dalmatians. They now are much more popular in England than they were before the war. The borzoi, Gordon setter, Welsh springer spaniel, Bedlington terrier, bull terrier, Dandie Dinmont, Sealyham, poodle, and Samoyede are given a "more popular" rating by the English publication Our Dogs.

Examining the status of these breeds in America, we find several differences. For example, the tremendous amount of attention being given the poodle in recent years, and the number of beautiful dogs of this breed that have been winning in shows and attracting new exhibitors, doubtless would warant moving the poodle from class two into class one, as they are considerably more popular. The Dalmatian would come out of class one ("much more popular" breeds) in this country. The Welsh springer hardly gets in the American "more popular" class, for it is but little known in this country. Before the war Americans knew little about the Welsh terrier. Today this breed still is given but scant attention. Not one Welsh springer was registered last year, and the same record for the breed was estab-



Welland Charming, this young Welsh terrier, was photographed when making his ring debut at a

the Dandie Dinmont is rated as Irish terrier, the Great Dane, "more popular" in England. and several other breeds as havular" list of breeds in England This little terrier may be a ing some decline in popularity. we find the dachshunde, Irish comer, but we wonder if it would Many dog fanciers would not setters, golden retrievers, Labra- be considered in the "more pop- accept such a rating for these dor retrievers, cocker and Eng- ular." class in America. The breeds in America. Bedlington hasn't made any tremendous gain in popularity.

> In England the dogs which are reported to be holding their own include the wolfhounds, English setters, Pekingese, pointers, Sussex spaniels, Welsh terriers, and others. American dog fanciers would want to revise this grouping for this country. In the first place, the Pekingese is much more popular here than it is in England. Today it holds first place among the toys. It might properly be moved into class two. And so could the Welsh terrier and several other breeds mentioned. As for the Sussex spaniel, it's a breed that Americans know very little about. It's rarely seen by sportsmen who use spaniels for hunting or by registered with the A. K. C.) the Boston terrier.

When we look back through the years we find several breeds that have dropped by the wayside yet should not be forgotten. One of the dogs that were very popular in the gay nineties was the little pug. Everybody wanted a pug for a house dog. Then this companionable little breed went into an eclipse. The breed lost its popularity. Up came the Boston and other small breeds to take its place. Fortunately the pug is today making new friends.

The German shepherd is another story of tremendous popularity for several years and then the long slide down hill. Shortly after the war the German shepherd swept the country. Then it was eclipsed by show visitors. (In 1937 only other breeds. In recent years eleven of these spaniels were the cocker has forged ahead of



Two beautiful Great Danes. At the left is Draeger's Black Knight, at the right Draeger's King of Shelternock. Both are owned by Dr. Louis Draeger.



 For attractive offers of dogs, turn to the Dogs, Cats, Birds, and Pets columns in the want ad section of today's Tribune.

