

Ulysses Returned

By HAROLD CARTER

(Copyright, 1915, by W. G. Chapman)

"Children's Day" was the idea of the superintendent of the new hospital. Old methods had been abandoned and new ones ruled. Doctor Oakley believed that in admitting the little folks of the town to the hospital grounds once a month, in charge of the matron, he would cheer up his convalescents, inspire the young people with a sense of pity, and bring contributions to the hospital.

Eli Baynes seemed a terribly old person to Dorothy and Ned, though, as a matter of fact, he was only forty. But he had returned from the West crippled with rheumatism, contracted by working in the silver mines, and after three months at the hospital he was only just beginning to regain his health.

He sat in his wheeled chair, and his eyes widened with pleasure as he saw his little friends approaching.

"Tell us another story, Uncle Eli," pleaded Dorothy, climbing upon his knee.

"Another story?" Eli inquired. "How many stories do you think I know?" "Hundreds," said Dorothy promptly. "You are so old, you see. You must be nearly a hundred, aren't you, Uncle Eli?"

"Not quite so old," laughed Eli Baynes. "How are you little folks getting on at home?"

"It's just like one of your own fairy tales, Uncle Eli," said Ned. "Ever since mother inherited that fortune

and there was a whole gang of men after Penelope. But Penelope was true to Ulysses, and she kept putting them off, and—"

"There's mamma!" shouted the little girl. "I told you I was going to bring her to see you, Uncle Eli."

She sprang to her feet, and, with the little boy, raced across the green toward a sweet-looking lady who was strolling quietly in their direction under the shade of the hospital trees.

Eli Baynes sat rigid in his chair. Then he looked wildly about him. He had begged the superintendent to get him a propelling chair, so that he could move from place to place, but as yet his desire had not been complied with. Now he felt a mad impulse to flee.

He sat up and glaucerly put one foot to the ground. He must escape at all hazards. To his surprise he found that a certain measure of flexibility had returned to his limbs; perhaps it was the will at work on the body. He put out his other leg, and for the first time in months Eli Baynes stood erect, without support, and straightened his twisted limbs and muscles.

Absorbed in this effort, he had not seen how quickly the three were approaching him again. As he was about to attempt the walk to the hospital he found himself confronted by the mother of the two children.

One glance into his face, a little gasp of fear, and Lucy Baynes was weeping on her husband's neck, her arms about him.

"Eli," she sobbed. "Oh, my dear, why didn't you come home to me after all these years?"

"You told me never to come back until I had made a man of myself," Lucy, said Eli doggedly. "I tried—I tried my hardest for ten years. I made a little fortune in the mines. I sent you everything I had."

"You, Eli? That legacy was really your money?"

He nodded. "And I did mean to ask you if you would take me back again. But I couldn't bear the thought of coming back to you a cripple. So I went to the hospital here. And I thought that if you had met somebody whom you cared for more, I had no right to stand in your way. I tried to find out, Lucy."

"There couldn't be," she sobbed. "I didn't know they were my children at first. Then I came to look for Children's Day, when I could see them. And when I got well I meant to go quietly away, if you cared for somebody else—"

"Oh, my dear, I have loved you always," she answered.

It was a happy party that gathered at the new house that night, and Ned and Dorothy, still open-eyed in wonder, had hardly realized that "Uncle Eli" was to be their father.

"Tell us some more about Ulysses, Uncle Eli," persisted Ned, climbing upon his knee.

"Why," said Eli in embarrassment. "It ended happily—very happily. Only I guess there was a lot more in Ulysses' life than ever got into his story."

GREAT VARIETY OF BIRD PETS

Lover of Feathered Creatures May Pay for Them Almost Any Price That His Fancy Dictates.



Felt a Mad Impulse to Flee.

A recent international bird show has provided some astonishing facts and figures regarding the value of song birds, remarks London Tit-Bits. There are nearly 100 classes of canaries. That they can be Norwich or Lancashire, border or Yorkshire variegated, lizard, unfledged, clear, crested, crested, self or foul convey a very little to the average mind, but leaves one marveling at the variety of chirping little creatures whose feathers are every conceivable shade of yellow. One marvels also at the variety of birds that could be kept as pets. Finches, linnets, redpolls, tom-tits, robins, wrens, stonechats, babblers, redstarts and long-tailed, short-tailed and crested varieties of all of them in every size from the minute humming bird to the plump scarlet cockatoo, all vie for the popularity which up to the present has been the monopoly of the canary. And these little birds are all quite cheap. A few shillings will buy most of them, but, on the other hand, \$2,500 would be asked for a gorgeous crimson bird of paradise, or \$5,000 for the emerald-bulfinch White Rose, the most expensive song bird in the world.

Some farmers store their ice in roughly constructed bins. One of this sort was seen, made by placing large posts of irregular sizes three feet in the ground and about four feet apart, and upon these were nailed a miscellaneous lot of boards; no roof was provided. The shrinkage was reported from 30 to 50 per cent. Ice might be stored in this manner for some purposes, but this method is not recommended for a dairy farm. Furthermore a bin of this sort is very unsightly and is an indication of slack methods in farming. Where ice is cheap and building material high, it might be permissible as a temporary arrangement; but it is not so economical a method as may appear at first sight, for the cost of the ice lost in the shrinkage would generally amount to more than the interest on the cost of constructing a serviceable icehouse.

An instance was observed in which a corner of a woodshed, about twelve feet square and ten feet high, had been converted into an ice shed. This corner of the woodshed had been roughly boarded up and about 14 inches of sawdust placed around the ice on all sides, top and bottom. The cost of the building was reported at about 20 per cent. The owner stated that softwood sawdust is a much better insulation than hardwood sawdust.

The icehouse in the illustration measures 15 by 20 feet on the outside and 8 feet high. At the front or south end a room 15 by 6 feet is partitioned off and used for a milk room. The remaining space, 15 by 14 feet by 8 feet high, after allowing for 6 inches of wall, 12 inches of sawdust on the sides, 12 inches on the bottom, and 18 inches on the top, will provide space for about 17 tons of ice. This house is built on high, sloping ground, where the soil is porous, consequently the drainage is satisfactory. The foundation is made of concrete (mixture 1 to 6), 1½ feet wide at the bottom and sloping gradually until the top measures 8 inches. The sills which rest on the foundation are 6 by 6 inches, upon which are erected 2 by 6 inch studs with 24-inch centers. On the top of the studs rests a 2 by 6 inch plate, and the studs are sheathed inside and outside with rough boarding. The outside is then covered with weatherboarding. The roof has a two-thirds pitch and is constructed of 2 by 4 inch rafters, 24-inch centers, boarded and covered with shingles. In each gable is located a slat ventilator, 2½ by 1½ feet, which with the high pitch of the roof allows for an abundance of free circulation of air over the ice. The milk room is provided with two glass

windows 3½ by 2 feet, one in each end. The milk room is provided only with a movable ice-water tank, 3½ by 4 by 3 feet, in which are placed the cream cans. A rope and pulley which are fastened to the ceiling are used in transferring the ice from the icehouse up and over the wall and lowering it into the tank. The material and labor for constructing this combination milk- and icehouse amounted to \$125. The shrinkage on the 100 cakes in storage was estimated at about 15 to 20 per cent. The ice in this house cost 2 cents a cake, exclusive of hauling and storing.

In many instances ice was stored in the cellar under the house or barn, or in the corner of some building, such as a woodshed, corncrib, or barn, or under the driveway leading to the barn, and occasionally it was simply stacked outdoors with no roof for protection. Where the ice was stored in cellars, open sheds or in stacks, the loss from melting was comparatively large, depending on the ventilation, drainage and care in packing. Where the cost of harvesting ice is a small item, dairymen often say that it is less expensive to store in such places than to go to the expense of building an up-to-date icehouse. Where ice is stacked outdoors and covered with some form of insulation, it is necessary to put up from 30 to 50 per cent more than the amount previously allowed, so as to provide for the heavy shrinkage.

The ice should be stored as near the milkhouse as possible, in order to save labor in removing it to the milk tank. A great many dairymen find it an advantage to have the milk room in one end of the icehouse. In this way the cost of a separate tankhouse is eliminated. The small amount of time and labor required to transfer the ice to the cooling tank generally acts as an added incentive for the free use of ice. It is highly important that the milk room, whether combined with the icehouse or standing alone, be located so that objectionable odors will be avoided.

In comparing the different methods of storing ice, it was found that where the cost of ice was comparatively high it was advisable to spend enough money in building and insulating the icehouse to protect the ice from melting as much as possible, but in cases where the cost of the ice was small it appeared that the owners were often justified in building a cheaper structure with a relatively high loss of ice from melting. The dairymen therefore should consider both the cost of construction and the cost of the ice in selecting the type most suitable for their requirements.

Some farmers store their ice in roughly constructed bins. One of this sort was seen, made by placing large posts of irregular sizes three feet in the ground and about four feet apart, and upon these were nailed a miscellaneous lot of boards; no roof was provided. The shrinkage was reported from 30 to 50 per cent. Ice might be stored in this manner for some purposes, but this method is not recommended for a dairy farm. Furthermore a bin of this sort is very unsightly and is an indication of slack methods in farming. Where ice is cheap and building material high, it might be permissible as a temporary arrangement; but it is not so economical a method as may appear at first sight, for the cost of the ice lost in the shrinkage would generally amount to more than the interest on the cost of constructing a serviceable icehouse.

An instance was observed in which a corner of a woodshed, about twelve feet square and ten feet high, had been converted into an ice shed. This corner of the woodshed had been roughly boarded up and about 14 inches of sawdust placed around the ice on all sides, top and bottom. The cost of the building was reported at about 20 per cent. The owner stated that softwood sawdust is a much better insulation than hardwood sawdust.

The icehouse in the illustration measures 15 by 20 feet on the outside and 8 feet high. At the front or south end a room 15 by 6 feet is partitioned off and used for a milk room. The remaining space, 15 by 14 feet by 8 feet high, after allowing for 6 inches of wall, 12 inches of sawdust on the sides, 12 inches on the bottom, and 18 inches on the top, will provide space for about 17 tons of ice. This house is built on high, sloping ground, where the soil is porous, consequently the drainage is satisfactory. The foundation is made of concrete (mixture 1 to 6), 1½ feet wide at the bottom and sloping gradually until the top measures 8 inches. The sills which rest on the foundation are 6 by 6 inches, upon which are erected 2 by 6 inch studs with 24-inch centers. On the top of the studs rests a 2 by 6 inch plate, and the studs are sheathed inside and outside with rough boarding. The outside is then covered with weatherboarding. The roof has a two-thirds pitch and is constructed of 2 by 4 inch rafters, 24-inch centers, boarded and covered with shingles. In each gable is located a slat ventilator, 2½ by 1½ feet, which with the high pitch of the roof allows for an abundance of free circulation of air over the ice. The milk room is provided with two glass

windows 3½ by 2 feet, one in each end. The milk room is provided only with a movable ice-water tank, 3½ by 4 by 3 feet, in which are placed the cream cans. A rope and pulley which are fastened to the ceiling are used in transferring the ice from the icehouse up and over the wall and lowering it into the tank. The material and labor for constructing this combination milk- and icehouse amounted to \$125. The shrinkage on the 100 cakes in storage was estimated at about 15 to 20 per cent. The ice in this house cost 2 cents a cake, exclusive of hauling and storing.

In many instances ice was stored in the cellar under the house or barn, or in the corner of some building, such as a woodshed, corncrib, or barn, or under the driveway leading to the barn, and occasionally it was simply stacked outdoors with no roof for protection. Where the ice was stored in cellars, open sheds or in stacks, the loss from melting was comparatively large, depending on the ventilation, drainage and care in packing. Where the cost of harvesting ice is a small item, dairymen often say that it is less expensive to store in such places than to go to the expense of building an up-to-date icehouse. Where ice is stacked outdoors and covered with some form of insulation, it is necessary to put up from 30 to 50 per cent more than the amount previously allowed, so as to provide for the heavy shrinkage.

The ice should be stored as near the milkhouse as possible, in order to save labor in removing it to the milk tank. A great many dairymen find it an advantage to have the milk room in one end of the icehouse. In this way the cost of a separate tankhouse is eliminated. The small amount of time and labor required to transfer the ice to the cooling tank generally acts as an added incentive for the free use of ice. It is highly important that the milk room, whether combined with the icehouse or standing alone, be located so that objectionable odors will be avoided.

In comparing the different methods of storing ice, it was found that where the cost of ice was comparatively high it was advisable to spend enough money in building and insulating the icehouse to protect the ice from melting as much as possible, but in cases where the cost of the ice was small it appeared that the owners were often justified in building a cheaper structure with a relatively high loss of ice from melting. The dairymen therefore should consider both the cost of construction and the cost of the ice in selecting the type most suitable for their requirements.

Some farmers store their ice in roughly constructed bins. One of this sort was seen, made by placing large posts of irregular sizes three feet in the ground and about four feet apart, and upon these were nailed a miscellaneous lot of boards; no roof was provided. The shrinkage was reported from 30 to 50 per cent. Ice might be stored in this manner for some purposes, but this method is not recommended for a dairy farm. Furthermore a bin of this sort is very unsightly and is an indication of slack methods in farming. Where ice is cheap and building material high, it might be permissible as a temporary arrangement; but it is not so economical a method as may appear at first sight, for the cost of the ice lost in the shrinkage would generally amount to more than the interest on the cost of constructing a serviceable icehouse.

An instance was observed in which a corner of a woodshed, about twelve feet square and ten feet high, had been converted into an ice shed. This corner of the woodshed had been roughly boarded up and about 14 inches of sawdust placed around the ice on all sides, top and bottom. The cost of the building was reported at about 20 per cent. The owner stated that softwood sawdust is a much better insulation than hardwood sawdust.

DIFFERENT TYPES OF DAIRY ICEHOUSES



Farmer's Icehouse With Milk Room.

(Prepared by the United States Department of Agriculture.)

The dairy division of the United States department of agriculture has been investigating the different types of icehouses in use by dairymen, and has studied the advantages of each type. Only a small number of the icehouses examined by the department's specialists were built of new lumber.

In many instances ice was stored in the cellar under the house or barn, or in the corner of some building, such as a woodshed, corncrib, or barn, or under the driveway leading to the barn, and occasionally it was simply stacked outdoors with no roof for protection. Where the ice was stored in cellars, open sheds or in stacks, the loss from melting was comparatively large, depending on the ventilation, drainage and care in packing. Where the cost of harvesting ice is a small item, dairymen often say that it is less expensive to store in such places than to go to the expense of building an up-to-date icehouse. Where ice is stacked outdoors and covered with some form of insulation, it is necessary to put up from 30 to 50 per cent more than the amount previously allowed, so as to provide for the heavy shrinkage.

The ice should be stored as near the milkhouse as possible, in order to save labor in removing it to the milk tank. A great many dairymen find it an advantage to have the milk room in one end of the icehouse. In this way the cost of a separate tankhouse is eliminated. The small amount of time and labor required to transfer the ice to the cooling tank generally acts as an added incentive for the free use of ice. It is highly important that the milk room, whether combined with the icehouse or standing alone, be located so that objectionable odors will be avoided.

In comparing the different methods of storing ice, it was found that where the cost of ice was comparatively high it was advisable to spend enough money in building and insulating the icehouse to protect the ice from melting as much as possible, but in cases where the cost of the ice was small it appeared that the owners were often justified in building a cheaper structure with a relatively high loss of ice from melting. The dairymen therefore should consider both the cost of construction and the cost of the ice in selecting the type most suitable for their requirements.

Some farmers store their ice in roughly constructed bins. One of this sort was seen, made by placing large posts of irregular sizes three feet in the ground and about four feet apart, and upon these were nailed a miscellaneous lot of boards; no roof was provided. The shrinkage was reported from 30 to 50 per cent. Ice might be stored in this manner for some purposes, but this method is not recommended for a dairy farm. Furthermore a bin of this sort is very unsightly and is an indication of slack methods in farming. Where ice is cheap and building material high, it might be permissible as a temporary arrangement; but it is not so economical a method as may appear at first sight, for the cost of the ice lost in the shrinkage would generally amount to more than the interest on the cost of constructing a serviceable icehouse.

An instance was observed in which a corner of a woodshed, about twelve feet square and ten feet high, had been converted into an ice shed. This corner of the woodshed had been roughly boarded up and about 14 inches of sawdust placed around the ice on all sides, top and bottom. The cost of the building was reported at about 20 per cent. The owner stated that softwood sawdust is a much better insulation than hardwood sawdust.

The icehouse in the illustration measures 15 by 20 feet on the outside and 8 feet high. At the front or south end a room 15 by 6 feet is partitioned off and used for a milk room. The remaining space, 15 by 14 feet by 8 feet high, after allowing for 6 inches of wall, 12 inches of sawdust on the sides, 12 inches on the bottom, and 18 inches on the top, will provide space for about 17 tons of ice. This house is built on high, sloping ground, where the soil is porous, consequently the drainage is satisfactory. The foundation is made of concrete (mixture 1 to 6), 1½ feet wide at the bottom and sloping gradually until the top measures 8 inches. The sills which rest on the foundation are 6 by 6 inches, upon which are erected 2 by 6 inch studs with 24-inch centers. On the top of the studs rests a 2 by 6 inch plate, and the studs are sheathed inside and outside with rough boarding. The outside is then covered with weatherboarding. The roof has a two-thirds pitch and is constructed of 2 by 4 inch rafters, 24-inch centers, boarded and covered with shingles. In each gable is located a slat ventilator, 2½ by 1½ feet, which with the high pitch of the roof allows for an abundance of free circulation of air over the ice. The milk room is provided with two glass

windows 3½ by 2 feet, one in each end. The milk room is provided only with a movable ice-water tank, 3½ by 4 by 3 feet, in which are placed the cream cans. A rope and pulley which are fastened to the ceiling are used in transferring the ice from the icehouse up and over the wall and lowering it into the tank. The material and labor for constructing this combination milk- and icehouse amounted to \$125. The shrinkage on the 100 cakes in storage was estimated at about 15 to 20 per cent. The ice in this house cost 2 cents a cake, exclusive of hauling and storing.

In many instances ice was stored in the cellar under the house or barn, or in the corner of some building, such as a woodshed, corncrib, or barn, or under the driveway leading to the barn, and occasionally it was simply stacked outdoors with no roof for protection. Where the ice was stored in cellars, open sheds or in stacks, the loss from melting was comparatively large, depending on the ventilation, drainage and care in packing. Where the cost of harvesting ice is a small item, dairymen often say that it is less expensive to store in such places than to go to the expense of building an up-to-date icehouse. Where ice is stacked outdoors and covered with some form of insulation, it is necessary to put up from 30 to 50 per cent more than the amount previously allowed, so as to provide for the heavy shrinkage.

The ice should be stored as near the milkhouse as possible, in order to save labor in removing it to the milk tank. A great many dairymen find it an advantage to have the milk room in one end of the icehouse. In this way the cost of a separate tankhouse is eliminated. The small amount of time and labor required to transfer the ice to the cooling tank generally acts as an added incentive for the free use of ice. It is highly important that the milk room, whether combined with the icehouse or standing alone, be located so that objectionable odors will be avoided.

In comparing the different methods of storing ice, it was found that where the cost of ice was comparatively high it was advisable to spend enough money in building and insulating the icehouse to protect the ice from melting as much as possible, but in cases where the cost of the ice was small it appeared that the owners were often justified in building a cheaper structure with a relatively high loss of ice from melting. The dairymen therefore should consider both the cost of construction and the cost of the ice in selecting the type most suitable for their requirements.

Some farmers store their ice in roughly constructed bins. One of this sort was seen, made by placing large posts of irregular sizes three feet in the ground and about four feet apart, and upon these were nailed a miscellaneous lot of boards; no roof was provided. The shrinkage was reported from 30 to 50 per cent. Ice might be stored in this manner for some purposes, but this method is not recommended for a dairy farm. Furthermore a bin of this sort is very unsightly and is an indication of slack methods in farming. Where ice is cheap and building material high, it might be permissible as a temporary arrangement; but it is not so economical a method as may appear at first sight, for the cost of the ice lost in the shrinkage would generally amount to more than the interest on the cost of constructing a serviceable icehouse.

An instance was observed in which a corner of a woodshed, about twelve feet square and ten feet high, had been converted into an ice shed. This corner of the woodshed had been roughly boarded up and about 14 inches of sawdust placed around the ice on all sides, top and bottom. The cost of the building was reported at about 20 per cent. The owner stated that softwood sawdust is a much better insulation than hardwood sawdust.

The icehouse in the illustration measures 15 by 20 feet on the outside and 8 feet high. At the front or south end a room 15 by 6 feet is partitioned off and used for a milk room. The remaining space, 15 by 14 feet by 8 feet high, after allowing for 6 inches of wall, 12 inches of sawdust on the sides, 12 inches on the bottom, and 18 inches on the top, will provide space for about 17 tons of ice. This house is built on high, sloping ground, where the soil is porous, consequently the drainage is satisfactory. The foundation is made of concrete (mixture 1 to 6), 1½ feet wide at the bottom and sloping gradually until the top measures 8 inches. The sills which rest on the foundation are 6 by 6 inches, upon which are erected 2 by 6 inch studs with 24-inch centers. On the top of the studs rests a 2 by 6 inch plate, and the studs are sheathed inside and outside with rough boarding. The outside is then covered with weatherboarding. The roof has a two-thirds pitch and is constructed of 2 by 4 inch rafters, 24-inch centers, boarded and covered with shingles. In each gable is located a slat ventilator, 2½ by 1½ feet, which with the high pitch of the roof allows for an abundance of free circulation of air over the ice. The milk room is provided with two glass

windows 3½ by 2 feet, one in each end. The milk room is provided only with a movable ice-water tank, 3½ by 4 by 3 feet, in which are placed the cream cans. A rope and pulley which are fastened to the ceiling are used in transferring the ice from the icehouse up and over the wall and lowering it into the tank. The material and labor for constructing this combination milk- and icehouse amounted to \$125. The shrinkage on the 100 cakes in storage was estimated at about 15 to 20 per cent. The ice in this house cost 2 cents a cake, exclusive of hauling and storing.

In many instances ice was stored in the cellar under the house or barn, or in the corner of some building, such as a woodshed, corncrib, or barn, or under the driveway leading to the barn, and occasionally it was simply stacked outdoors with no roof for protection. Where the ice was stored in cellars, open sheds or in stacks, the loss from melting was comparatively large, depending on the ventilation, drainage and care in packing. Where the cost of harvesting ice is a small item, dairymen often say that it is less expensive to store in such places than to go to the expense of building an up-to-date icehouse. Where ice is stacked outdoors and covered with some form of insulation, it is necessary to put up from 30 to 50 per cent more than the amount previously allowed, so as to provide for the heavy shrinkage.

The ice should be stored as near the milkhouse as possible, in order to save labor in removing it to the milk tank. A great many dairymen find it an advantage to have the milk room in one end of the icehouse. In this way the cost of a separate tankhouse is eliminated. The small amount of time and labor required to transfer the ice to the cooling tank generally acts as an added incentive for the free use of ice. It is highly important that the milk room, whether combined with the icehouse or standing alone, be located so that objectionable odors will be avoided.

In comparing the different methods of storing ice, it was found that where the cost of ice was comparatively high it was advisable to spend enough money in building and insulating the icehouse to protect the ice from melting as much as possible, but in cases where the cost of the ice was small it appeared that the owners were often justified in building a cheaper structure with a relatively high loss of ice from melting. The dairymen therefore should consider both the cost of construction and the cost of the ice in selecting the type most suitable for their requirements.

Some farmers store their ice in roughly constructed bins. One of this sort was seen, made by placing large posts of irregular sizes three feet in the ground and about four feet apart, and upon these were nailed a miscellaneous lot of boards; no roof was provided. The shrinkage was reported from 30 to 50 per cent. Ice might be stored in this manner for some purposes, but this method is not recommended for a dairy farm. Furthermore a bin of this sort is very unsightly and is an indication of slack methods in farming. Where ice is cheap and building material high, it might be permissible as a temporary arrangement; but it is not so economical a method as may appear at first sight, for the cost of the ice lost in the shrinkage would generally amount to more than the interest on the cost of constructing a serviceable icehouse.

An instance was observed in which a corner of a woodshed, about twelve feet square and ten feet high, had been converted into an ice shed. This corner of the woodshed had been roughly boarded up and about 14 inches of sawdust placed around the ice on all sides, top and bottom. The cost of the building was reported at about 20 per cent. The owner stated that softwood sawdust is a much better insulation than hardwood sawdust.

The icehouse in the illustration measures 15 by 20 feet on the outside and 8 feet high. At the front or south end a room 15 by 6 feet is partitioned off and used for a milk room. The remaining space, 15 by 14 feet by 8 feet high, after allowing for 6 inches of wall, 12 inches of sawdust on the sides, 12 inches on the bottom, and 18 inches on the top, will provide space for about 17 tons of ice. This house is built on high, sloping ground, where the soil is porous, consequently the drainage is satisfactory. The foundation is made of concrete (mixture 1 to 6), 1½ feet wide at the bottom and sloping gradually until the top measures 8 inches. The sills which rest on the foundation are 6 by 6 inches, upon which are erected 2 by 6 inch studs with 24-inch centers. On the top of the studs rests a 2 by 6 inch plate, and the studs are sheathed inside and outside with rough boarding. The outside is then covered with weatherboarding. The roof has a two-thirds pitch and is constructed of 2 by 4 inch rafters, 24-inch centers, boarded and covered with shingles. In each gable is located a slat ventilator, 2½ by 1½ feet, which with the high pitch of the roof allows for an abundance of free circulation of air over the ice. The milk room is provided with two glass

windows 3½ by 2 feet, one in each end. The milk room is provided only with a movable ice-water tank, 3½ by 4 by 3 feet, in which are placed the cream cans. A rope and pulley which are fastened to the ceiling are used in transferring the ice from the icehouse up and over the wall and lowering it into the tank. The material and labor for constructing this combination milk- and icehouse amounted to \$125. The shrinkage on the 100 cakes in storage was estimated at about 15 to 20 per cent. The ice in this house cost 2 cents a cake, exclusive of hauling and storing.

In many instances ice was stored in the cellar under the house or barn, or in the corner of some building, such as a woodshed, corncrib, or barn, or under the driveway leading to the barn, and occasionally it was simply stacked outdoors with no roof for protection. Where the ice was stored in cellars, open sheds or in stacks, the loss from melting was comparatively large, depending on the ventilation, drainage and care in packing. Where the cost of harvesting ice is a small item, dairymen often say that it is less expensive to store in such places than to go to the expense of building an up-to-date icehouse. Where ice is stacked outdoors and covered with some form of insulation, it is necessary to put up from 30 to 50 per cent more than the amount previously allowed, so as to provide for the heavy shrinkage.

The ice should be stored as near the milkhouse as possible, in order to save labor in removing it to the milk tank. A great many dairymen find it an advantage to have the milk room in one end of the icehouse. In this way the cost of a separate tankhouse is eliminated. The small amount of time and labor required to transfer the ice to the cooling tank generally acts as an added incentive for the free use of ice. It is highly important that the milk room, whether combined with the icehouse or standing alone, be located so that objectionable odors will be avoided.

In comparing the different methods of storing ice, it was found that where the cost of ice was comparatively high it was advisable to spend enough money in building and insulating the icehouse to protect the ice from melting as much as possible, but in cases where the cost of the ice was small it appeared that the owners were often justified in building a cheaper structure with a relatively high loss of ice from melting. The dairymen therefore should consider both the cost of construction and the cost of the ice in selecting the type most suitable for their requirements.

Some farmers store their ice in roughly constructed bins. One of this sort was seen, made by placing large posts of irregular sizes three feet in the ground and about four feet apart, and upon these were nailed a miscellaneous lot of boards; no roof was provided. The shrinkage was reported from 30 to 50 per cent. Ice might be stored in this manner for some purposes, but this method is not recommended for a dairy farm. Furthermore a bin of this sort is very unsightly and is an indication of slack methods in farming. Where ice is cheap and building material high, it might be permissible as a temporary arrangement; but it is not so economical a method as may appear at first sight, for the cost of the ice lost in the shrinkage would generally amount to more than the interest on the cost of constructing a serviceable icehouse.

An instance was observed in which a corner of a woodshed, about twelve feet square and ten feet high, had been converted into an ice shed. This corner of the woodshed had been roughly boarded up and about 14 inches of sawdust placed around the ice on all sides, top and bottom. The cost of the building was reported at about 20 per cent. The owner stated that softwood sawdust is a much better insulation than hardwood sawdust.

TAB ON THE 'PHONE

Meter Tells Exactly How Long One Has Talked.

Sweet Conversation of Lovers, and Neighborhood Gossip, Alike Will Be Measured by Contrivance Claimed to Be Perfect.

Hereafter you will have no show with the telephone operator when disputing as to whether you talked over your allotted time, and must pay extra, for they have geared a meter to the 'phone so that the time is clearly indicated. The costly whimsicalities of the taxicab meter at once come to mind, suggesting that a new sort of meter to be added to the operation of the telephone. All service in this time of efficiency and exactitude tends to be metered. The gas and electric meters we know; the water meter some oppose frantically, but vainly; the meter in the taxicab drives us mad as it ticks off the miles, and now we are even to talk by meter!

Increased efficiency has come to be pretty much the secret of increased subscribers' lists, increased revenue and increased cordiality in the business of telephony generally. Nowhere along the line, however, has the cordiality been more often or more sorely strained than through inefficient, inadequate or careless timing of toll calls.

Particularly is this true, declares Telephony, in smaller offices, where the elaborate and necessarily expensive apparatus for timing calls has been too costly for installation, and dependence has been placed upon ordinary clocks, which, are, of course, as unsatisfactory to the company itself as to the telephone-toll user. The 'phone-meter, it is claimed, has completely solved this small oft-mentioned problem, and in larger offices it is already proving of great value in the timing of the handling of calls on the observation desks.

As shown in the accompanying illustration, the 'phone-meter registers up to six minutes in one revolution of the dial, and it continues until stopped. When a connection is made by the operator starts the meter to record by moving to the right the lever at the top. Moving it in the reverse direction stops the indicator instantly, showing the exact time which has elapsed in minutes and seconds. The dial is graduated to seconds, and the device, it is said, is marvelously accurate.

The 'phone-meter is placed upon the keyboard within convenient reach of the operator. If while the conversation is in progress an interruption occurs the meter may be stopped and then started again when service is resumed. The operator is thus not obliged to make any calculations as to the time consumed. The 'phone-meter may also be used by subscribers to check the time of toll calls.

This is all very well for the powerful corporation anxious to prevent the slightest loss of earnings, but it is said that sentiment is not even remotely considered, says one sweet young thing who has phoned. "Imagine," she suggests with sorrow and contempt, "hitching a stopclock to a real sweet-and-tender love conversation! Why, they are simply clocking the whole of romance out of the world! This measure by clocks and

measures will simply reduce the human race to unimaginative cogs in a big machine—a perfect mechanism, I will admit, but still a machine."

Battle-Ax Once More. Among the many old-time weapons that have been seen in the present war is the battle-ax. A British outpost, trapped by the enemy as they were chopping wood for camp fires, not many days since, whipped round in their shirt sleeves and did deadly work with their axes. So usefully did this mode of lighting serve them that they steadily drove the foe before them.

It was too short a range for the German rifles to be of any use, while for the English soldiers the grasp on the German rifle barrel and the swing-in, blow of the ax in the other hand did all that was required, and few got away to tell the tale.

Another Mystery of the Sea. Another mystery of the sea occurred recently off the English coast. Three miles from Jersey, the fishing smack Ella 707 of Granville has been found derelict. She had a catch on board in good condition; her sails were set, though badly torn, but there was no sign of the crew. Some years ago a similar case occurred. The Marie Celeste, a large sailing ship, was found somewhere in the Mediterranean in like circumstances. Those who went aboard saw everything undisturbed, a meal half-eaten and barely cold, clocks going, and not a soul on board; and nothing has been heard of her crew from that day to this.

Trade Statistics. An export total of approximately \$75,000,000 is the indicated record of American manufacturers of cotton goods in the fiscal year 1915, while imports of cotton manufacturers will probably fall below \$50,000,000, making the balance of trade