Science Guarus Liby's Dinner.

An Object Lesson to Young Mothers Regarding the Proper Care of the Nursing Bottle.

rectly or indirectly, is the cause of the majority of deaths of infants is the consensus of opinion among the best medical authorities. Much as has been written and prayed and preached against it, there are few mothers who regard the nursing bottle with the proper amount of fear which it inspires in the man of science.

spires in the man of science.

"Always remember that there is a risk—a great risk—however careful you are, in bringing up your baby on the bottle," was the advice given a young mother the other day by Mrs. M. C. Dunphy, the superintendent of M. C. Dunphy, the superintendent of Randali's Island, New York City. The young mother, the wife of a

well-to-do Harlem tradesman, had gone over to the island to find out how milk and milk bottles and nursing nip-ples were really sterilized. She had read in the papers and the magazines hundreds of directions, and none of them seemed to agree, or else the directions were not worded plainly. Her three-months old baby was not thriving, and she very wisely determined to have somebody show her exactly how to sterilize milk and bottle and nurs-

hundreds of other would-be scientific mothers, this one had been "sterilizing" milk by simply immers-ing the bottles in water and allowing them to remain until the water reached the boiling point, and as a matter of fact the milk was thereby rendered even more dangerous than before it had been sterilized.

The mother was then shown by sim-plified process how she could prepare her baby's milk at home with the joy ful certainty that after sterilizing it was absolutely pure and germ proof.

At Randall's Island they have the most complete facilities for the suc-



cessful rearing of "bottle babies" of any place in the world. consists of straining the nilk, which is done by a patent separator, for Randall's Island is raising just now 140 babies on the bottle.

The straining of the milk is a most important feature, and can be done quite as well at home as at Randall's Island. Mrs. Dunphy showed the young mother how. Taking two yards of cheese cloth which had already been boiled twenty minutes, she folded this into a little bundle about eight inches square, laid it in an earthenware pie plate and placed the plate in a hot oven, where it remained until the top fold began to get brown. A coarse towel was also put in the oven at the same time.

Nine little squares were cut out of the cheese cloth with bright clear scissors. Three of these squares were tied over a common milk strainer, the milk was poured through into another similar strainer, similarly fixed with sterilized cheese cloth, and still through another strainer

is appalling how much dirt and

That the nursing bottle, efther di- one of the old-fashioned death-dealing horrors with a long rubber tube, but

with just a single rubber nipple.

Mrs. Dunphy filled ten bottles, the requisite number for one baby. The bottles were inserted in cylinders, bound together for convenience by a tin band. These cylinders can be made by any tinsmith for twenty-five or thirty cents per set of ten. The bottles, corked up tightly, the cylin-ders were set in a porcelain kettle full

in the morning to last all day, and in the evening to last until next morn-ing. More than that should never be ing. More than that should never be sterilized, because, while the milk may keep sweet a much longer time it loses much of its nutritive power if allowed to grow the least bit stale.

If baby appears to be not thriving, and the mother can determine this by weighing it carefully every other day, then its milk is not agreeing with it, and a physician should be consulted immediately. The healthy baby will increase in weight between certain ages, while at others it will remain almost uniform, but it will never lose weight. The falling off in weight of even an ounce or two means some-thing, and what this something is none but the physician should determine.

In just what proportions to dilute the milk after it has oeen sterilized and bottles and nipples made germ of lukewarm water, just large enough to hold them without allowing them proof, is a question often asked by mothers through the columns of news-



THE COOLING PROCESS

to wabble. The kettle was placed on a cook stove and the water allowed to bubble and boil around the bottles for not less than twenty minutes. Then it was pronounced sterilized.

Lifting the cylinders out of the ket-tle, they were set in a sink and the cold water faucet turned on. It is important that the milk should be thus cooled and in running water before being put in the icebox; if put in the icebox immediately after taking from the boiling water the milk gets cold too quickly, and all the beneficial results of the sterilizing are neutral-

The milk must then be kept on ice until time for feeding the baby, when the bottle is again immersed in hot water until the milk is heated to 98 degrees, or the warmth of mother's milk.

After feeding, just as quickly as pos-sible, the bottle and nipple must be rinsed in cold water, then put in a ket-tle with a piece of borax and allowed to boil for twenty minutes.

While the bottles were boiling Miss Margaret McCarthy, the assistant supervising nurse, showed the young mother how to sterilize the bottles and nipples after they came out of the

"Never lay a bottle on its side, but turn it up." said Miss McCarthy. "Many mothers imagine if they have boiled nipples and laid them on the window sill to dry in the sun that all the germs are destroyed. That is all wrong. The warm sunshine only warms the little stray germs into life,"

Two folds of the sterilized cheese cloth were then laid on a piece clean, unpainted board-a kneading board is a good thing—and the bottles, necks downward, were dropped into the interstices of a wire rack and allowed to drain on to the cheesecloth. The nipples were dried with a piece of the same sterilized material and then wrapped in cheesecloth. The remainthe cheesecloth was folded up It is appalling how much dirt and der of the cheesecloth was folded up dust there is even in the cleanest milk. in the sterilized towel and put away

papers. No general rule can be formulated to answer this question. That is something which the physician alone can determine. The formula that will agree perfectly with one baby often proves the death of another. Each baby requires individual attention, and the wise mother will avoid anything except professional advice regarding the preparation of her baby's

If the mother at home will guard the nursing bottle for one mite of a baby with as much rigor as Mrs. Dunphy and her assistants look to the bottles for their 142 babies, the death rate among city children might be reduced



CHEESE CLOTH.

to a minimum within the next two

years.

The Randall's Island babies, poor little waifs picked up in doorways, railway stations, deserted warehouses and occasionally fished out of damp. leaky old scows or garbage cans, wax strong and flourish on a bottle diet. while the child of well-to-do parents, living in a comfortable home, often dies of neglect-that is, neglect of the

The Randall's Island bables are invariably more dead than alive when they reach the hospital. Every so often when the shabby little bundle is unrolled on arrival it is discovered that the little feet are stiff and cold. and many a feeble life ebbs the boat that carries the frail burden s moored to the landing.

And still a larger percentage of these babies live and grow into strong, hearty children than any other class of bottle-fed infants, not because they are pampered and cared for like hothouse flowers, for where there are 142 babies there is no time for pampering, but because the milk bottle is feared, as it must be by all conscientious mothers.—New York Herald.

A Little Mistake in Medals.

The chief officer of a Yorkshire yeo

manry regiment, while congratulating one of the troops on its appearance, made a stirring allusion to the medals worn by some army veterans in the ranks. One of the men, a nain the ranks. One of the men, a native of Wharfdale, afterward went home in a very thoughtful frame of mind, and next morning he came on parade with several medals on his breast. Said the officer,"I didn't know you had been in the regulars." "No, I ain't," said the man. "Well, how about the medals, then, my good fel-low? They can't be yours." The man promptly answered: "Can't they! Aye, but they be. My old coo won 'em all at Otley Show."—Upper Wharfdale.

Fox-Hunting Parson

until time to go through the same process in the evening.

The milk should be prepared twice a day—mornings and evenings; that is, enough should be prepared at one time of the Cattistock and Coniston packs.

A UNIFORM FOR WOODMEN. Dress For Cold Weather Adopted by

The forest superintendents and woodsmen in Montana have recently adopted a uniform, as shown in the ac-companying photograph, which will be worn by them while ranging in the public forest reservations in that State during the winter. These uniforms have been submitted to the Secretary of the Interior and the Commissioner of the General Land Office, and efforts



may be made to have all Government forest employes furnished with similar These men are exposed to much bad weather. A suitable uni-form is certainly essential to their performing their duties satisfactorily.

Now that the forest reservations

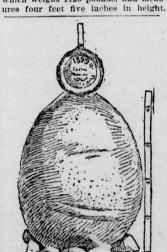
have become a source of revenue to Government, the duties of the for esters are more important, and their instructions are more rigid. In 1898 there was cut and sold about \$300,000 worth of timber from Western forest With proper care of the for ests and an efficient corps of men to guard against forest fires, it is ex-pected that this revenue will steadily

Timber is in every country an important natural product, and in this country it has been especially plentiful, but up to within four or five years the American forests were allowed to run down and left in a bad condition. Since Commissioner Binger Herman became the official head controlling the forests many schemes have been instituted to repair the damaged for-ests, and their present improved condition is largely due to his strenuous efforts. One of his most recent schemes is the telephone system, which was established in California last spring. This system was only an experiment, but in all probability it will eventually be extended to all forest reserves in the United States .-New York Tribune.

RUBBER BISCUITS.

The Shape in Which the Para Product is Shipped.

To form the biscuits, the natives take long stakes of wood, sometimes pointed at the end, and quite frequently shaped like a paddle, dip them into the sap buckets or basins, holding them in the smoke after each dipping until the successive films of rubber around them. A biscuit of Para rubber, therefore, represents the slow and laborious accumulation of hundreds of dippings, so that quite a stretch of the imagination would be necessary to arrive at the number of dippings required to form the huge biscuit illustrated herewith. which weighs 1120 pounds, and meas-



RUBBER BISCUIT.

three feet five inches in diameter and nine feet four inches in circumference. Such immense masses of crude are said to actually represent a loss to the grower, being used principally by importers for exhibition purposes. Sometimes the natives use a stone as a nucleus, and, to prevent this method of securing an illegitimate profit, the biscuits are split in halves before shipment so as to reveal the stake hole running through the middle.

Railway whiseles inflict tortures on so many people that Austria has intro-duced a system of silent signaling. Belgium is trying compressed air whistles instead of steam, and Germany experiments with horns.



Her Name Is Peg.

Her Name Is Peg.
In search from A to Y they passed—
And "Marguerita" chose at last—
But thought it sounded far more sweet
Fo call the baby "Marguerite."
When grandma saw the little pet.
She called her "darling Margaret."
Next, Uncle Jack and Cousin Aggie
Sent cup and spoon to "little Maggie,"
And grandpapa the right must beg
To call this lassie "bonnie Meg"—
(From "Marguerita" down to "Meg.")
And now she's simply little "Peg."
—St. Nicholas.

A Cozy Bed for Dollie.

A pretty doll bed can be made from a grape basket. Remove the handle and replace one-third of the way from the end. Line the basket neatly with silkoline or cheese cloth, and wind the handle with a strip of the same, and again with marrow ribbon, ending in a bow at each end of the handle. Put a ruffle, edged with narrow lace around the outside of the basket. Enclose the short end by fastening a canopy of the material used to handle and edge the basket. Fasten lace-edged curtains to the top of the handle drawing to either side, where they may be tied with rib bon. Cover a piece of pasteboard to fit the bottom of the basket and the bed is ready for mattress, pillow, etc. It is fine enough for the queen of all the dolls.

Rare Intelligence in a Horse.

From San Francisco comes a story of a horse that saved its life by holding to a rope with its teeth. At the time of the incident the horse was being led across a gang-plank to a boat. The tooting whistle of a tug caused the horse to shy into the water. There was no place for theunfortunate crea ture to get out and it looked as if it would have to drown. As a last resort a man threw a coil of rope out to the horse. The line no sooner struck the water than the intelligent animal seized it between the teeth and held on. In this way his head was kept above water until a boat came, a hawser was fastened around the horse's neck and the creature was towed ashore. The horse was valued at \$1000, and after its unexpected plunge was loaded aboard ship and went to Tacoma.

Everyday Love.

A group of little girls were telling of the love each felt for her mother; and, as the testimony went on, the strength of the statements grew, each child feeling obliged to surpass her mates. Finally, one said positively, "I love my mother so much I would die for her." The impressiveness of this declaration subdued the circle. The cli-max had been reached. A wholesome turn was given to the situation by the quiet observation of a lady sitting near, "It seems very strange to me that a single girl that loves her mother enough to die for her doesn't love her enough to wash the dishes for her." We who are older and know better require just such homely reminders to bring us back from our theories to our conditions. The love that is to "the level of every day's most common needs" is the only genuine kind .- Congregationalist.

The Upside-Down House.

A house topsy-turvy is one of the oddities described by George W. Curren in an article in St. Nicholas entitled "Play-Hours at the Paris Exposition.' Not far from Old Paris, in the Rue

de Paris, a street crowded with concert-halls, burlesque spectacles, cafes, and the many attractions and distractions of modern Paris life, one comes unexpectedly upon the amusing Upside-Down House or Manoir a l'Envers. Did some great giant stride through the avenues of the Exposition in the dead of night, and, thinking to play a joke on the world, pick up this stone castle, and set it upside down upon its chimneys and towers? At any rate, here it stands, the Gothic arches of its windows pointing downward, its sculptors, coat of arms, clock, flags, all in the same absurd position, while through an open wind we catch a glimpse of a room wir se chairs and tables cling to the ceiling, and waiters with their heads downward in the air move about, bearing trays of entables turned upside down to upside down patrons sitting at the upside-down tables. Has the law of gravitation been suddenly suspended to bene fit the projectors of the Paris Exposi tion? We cannot resist the temptation to enter and so up-or is it down? winding staircase in the tower. Above, we find the various rooms, bedroom, and even bath-room, all the contents of which follow the strange law of this strange house.

We discover, before long, that much is due to a clever arrangement of mirrors, while other curious mirrors, convex, concave, and variously curved, show us to ourselves in surprising and distorted shapes and attitudes.

Dancer's Thanks.

"Help! Help!" buzzed Dancer, strug-gling wildly in the white creamy milk. "Oh, I shall drown if some one does not come quickly!" "Hulle! What's all this noise about?"

said a loud voice; and a pair of big, round eyes looked over the top of the milk-jug. Poor little Dancer nearly fainted with fright, though the owner of the round eyes did not seem at all cross; but, putting in his .nger, he carefully rescued the little fly from the milky sea. Little Daucer hunself was deeply interested in what followed: the gentleman put him on a piece of red, hairy paper, which quick-

ly dried all the milk. "Thank you so much!" cried Dancer, in fly language. "I shall soon be quite well again now." And, after a little while, he unfolded his wings, and flew up to where his brother and sister were dancing near

the ceiling.
One day, some time after this, Dancer was crawling contentedly up the window, when Brightwings, his eldest sister, came flying up.

"Oh, we're having such fun!" she buzzed. "Won't you come and play with us? Do"

"Where are you playing?" asked Dancer, as they flew together into the

"It's such a nice place," said Bright-wings. "On a man's head that's not a bit hairy."

She flew up to the gentleman who

was sitting under the trees, and set-tled on his bald head.

Her brother, who had recognized his friend of the milk-jug, followed her; and they had a merry game. But, in a few minutes, Dancer no-

ticed that the owner of the head kept putting up his hand as if to drive them away, and making queer little noises.
"Stop a minute, Brightwings," he said. "He doesn't like it."

"Nonsense!" cried his sister. "What does that matter? And why shouldn't

"I can't tell you," laughed Dancer. "But we musn't stay any longer."
"It's so jolly! I don't want to go!" said Brightwings.

But Dancer was firm.
"If he hadn't saved me, I should have been drowned," he replied. "And we musn't worry him, and prevent his

going to sleep like that."
"Very well," said Brightwings. "Let's

go and have some jam!"
So the two flew off to the pantry. leaving the old gentleman to finish his nap in peace.-Cassell's Little Folks.

Something About Spiders.

If the world were not so full of "little Miss Muffets" the children would know more about spiders, as there are really no more interesting insects to study But as soon as the spider will sit down beside her, then Miss Muffet runs frightened away.

Now, what she ought to do is to sit

perfectly still and watch the spider, and take note of the interesting things it will do. If it is the common garden spider it will soon suspend it-self by a silken line or travel across a cable bridge to the nearest twig or branch.

It is a familiar sight to Miss Muffet who takes early morning walks to come upon the lines or webs of the gossamer spider, a silken network, studded with dewdrop diamonds, spread over hedge and field. These gossamers serve as balloons to the spiders, and the apparent flight of this wingless insect from tree to tree, across water and even through the upper regions of air has been almost as great a puzzle to naturalists as the fly's walk

on the ceiling.

When the weather is dry, warm and still, some spiders will be seen hanging motionless, head downward in the centre of their wheel-like webs lying in wait for prey, while others, at the top of the blades of grass or rail posts, are patiently waiting for a rising breeze to assist them in shooting their lmes high into the air. As these silver threads are carried aloft the spiders go along with them, and after a while the threads are brought together by the action of the upper air, and gradually assume the shape of fleecy flakes, composed of irregular silky masses When the upward current ceases they fall to earth again, and numerous winged insects are found entangled in

them. Other webs for Miss Muffet to study are those large, white sheets, sloping downward into tunnels, numbers of which are so frequently seen spread out upon the grass and lower bushes. These webs serve as a house to the spider, who, sitting near the mouth of the tunnel, and shaded by the darkness of the covered way is ready to rush forth and seize the first unfortunate insect to become entangled in the

Then there are the spiders who make their houses in curled up leaves. Often these leaves are used by the er spider, who is keeping a tender watch over a bagful of eggs.

An interesting variety is the diving spider, and perhaps Miss Muffet has often seen shining through the water a little globe, apparently of silver, which forms the perfectly dry apartment of the diving spider, in which, like a mer-maid or a sca nymph, it resides in comfort, and, unmoved by storms, it devours its prey at case. It builds its house by first attaching loose threads in various directions to leaves of water plants to form the frame work to leaves of of its chamber. Over these it spreads a transparent, clastic varnish like iquid glass. It fills this bubble with nir at the surface, and then plunges down to the bottom of fae pond, where it is able to breathe for a long time, and feed upon the water bugs .- New York Tribune.

Colonial Methods of Travel

Wherever the earliest colonies settled in America, they had to adopt the modes of travel and the ways of get-ting from place to place of their predecessors and new neighbors, the Indians, These were first, and generally, to walk on their own stout legs; second, to go wherever they could by water, in boats. In Maryland and Virginia, where for a long time nearly all set-tlers tried to build their homes on the banks of the rivers and bays, the travel was almost entirely by boats, as it was between settlements on all the great rivers, the Hudson, Connecticut and Merrimack.



PUTTING THE BOTTLES INTO THE BOILER.

The milk was then put into a large nirtight bottle, and the bottle set into tee to get very cold, but not to freeze. When sufficiently cold it was poured into an eight ounce nursing bottle—not