

as well as a seeing child; but you must be patient and give the child much practice in doing such things because he can not learn by observation.

Watch carefully the child's personal appearance and bearing. He can not see how others act and so readily acquires habits which are disagreeable to his companions. Some of the most common mannerisms of blind children are rocking the body, twisting the head about, sticking the fingers into the eyes, distorting the face, swinging the arms, shaking and hanging the head in walking, and bending over in sitting. As soon as you observe such practices in your child, you should set yourself with patient determination to break them up, and with gentleness and firmness to rectify them. Once they become habits, years of schooling will not undo the mischief.

Allow the child to take part as early

as possible in household duties.

Speak with your child frequently, for, since he can not read the loving care which is written on your face, he has a special need of hearing your voice. Ask the child frequently what he hears and feels, and encourage him to ask many questions as to what is going on around him.

Take care what you say before your child, for the blind child is more attentive to all that he hears than the seeing child is.

Never express regret in his presence at his blindness. Never allow others to do so. Encourage him to be happy and bright and to do his work with spirit and pleasure in order that in later years he may become independent of outside assistance.

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road. The highway can be built for around \$450 a mile, where \$1,500 is a minimum cost for a mile of asphalt road. Thus, by this method many roads can be surfaced which do not get enough traffic to warrant the expense of a hard surface finish.

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#### ETHNOLOGY

### Discover Where Indian Maid Tricked Spaniard De Soto

THE SCENE in the American wilderness where a clever Indian girl "made a fool" of Hernando de Soto has been located by a modern exploring scientist following de Soto's trail.

Dr. John R. Swanton of the Bureau of American Ethnology announces that the celebrated incident took place "with high degree of probability" near Franklin, North Carolina, on the Little Tennessee River.

Here, the lady of Cofitachequi, Indian woman chief who was carried captive by the marching Spaniards, outwitted de Soto and even managed to take her trunkful of pearls with her in the escape.

The Indian, described by de Soto's secretary as a young girl of fine bearing, had come to greet the Spaniards riding in a litter covered with delicate white fabric. She had taken off her pearl necklace to present to the Spanish governor, and talked with him gracefully and at her ease. The fresh water pearls greatly impressed the treasure-hunting Spaniards, who explored and found quantities in the village buildings. When they moved along, the lady of Cofitachequi was carried with them, and one of her woman attendants bore a cane box, like a trunk, filled with unbored pearls.

But one day she slipped into a thicket off the road, carrying with her the attendant, pearls and all. And all de Soto's army, searching frantically, could not find her.

Dr. Swanton, well-known authority on de Soto's route to the Mississippi, picked up an ancient, well-marked trail which ran across steep mountain ridges to Franklin. Matching the narratives in various de Soto expedition diaries to the terrain, he located the probable site of the old Indian town of Xualla, mentioned in de Soto adventures, and placed the escape of the girl on the plain of Franklin. The location, he said, fits all requirements of the scene as described by the Spaniards.

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A ton of onions may yield no more oil than one-tenth of a pint, but that small amount is highly potent.

#### ENGINEERING

## Highways of Salt In Use Now In New York State

HIGHWAYS of salt are now being built as the result of the experiments of Dr. Cloyd D. Looker, research director of the International Salt Company of Ithaca. These "salt-soil-stabilized" roads are proving very successful as highways which do not carry a lot of traffic but which must be built and maintained at a low cost. In the "farm-to-market" type of road, where traffic does not exceed 500 cars a day, it is considered one of the cheapest and best methods yet devised to "get the farmer out of the mud."

A highly successful road of this type has been in use for the past two years to connect the city of Ithaca with its new airport. A temporary salt road was installed while the airport was in process

of construction. Thousands of loads of "fill" moved over this highway, which will shortly be hard surfaced to join a permanent artery of travel.

More than one method can be used in applying the salt. One way is to mix the salt with the road material by blading, meanwhile sprinkling water on to moisten the mixture, and then rolling it to a firm surface. Another method is to build the road up in layers, interspersing a layer of salt with layers of road material. The salt thus laid soon permeates the entire mass by capillary attraction. About 12 tons of salt are used to the mile of an 18-foot highway, or about two pounds per square yard.

The salt draws the moisture from the air and keeps the surface moist. At the same time it reduces the film of moisture around each particle of clay, so that the clay packs down to a harder surface. Not only does the salt compact the clay, giving a concrete-like surface, but it also crystallizes on the road surface and retards evaporation of water from the road, thereby keeping the material underneath in a moist condition. Once the crystallization has taken place, the road sheds water during a rain and does not become slippery or muddy. It resists traffic abrasion to a marked degree.

The cheapness of rock salt is one of the great virtues of the salt-stabilized

## ● RADIO ●

Tuesday, August 13, 3:30 p. m., E.S.T.  
COLLECTING OLD HOUSES, by Dr. Laurence V. Coleman, Director, American Association of Museums.

Tuesday, August 20, 3:30 p. m., E.S.T.  
WHY WE NEED BIRDS AND MAMMALS, by Dr. Joseph Grinnell, Professor of Zoology, University of California.

In the Science Service series of radio addresses given by eminent scientists over the Columbia Broadcasting System.