

they were the healthiest since they seldom contracted the big scourge of the day, smallpox. Dr. Edward Jenner investigated the barnyard magic and decided the girls' constant exposure to the milder cowpox germs was the big reason for their immunity. In 1796, he developed a vaccine from cowpox bacteria.

COBWEB BANDAGES

A nimal lore cuts a wide swath in the superstition manual. A faithful few ranchers still consider it downright poor management to brand, castrate or wean calves unless the Zodiac is right.

Extension Animal Husbandman, Robert C. de Baca of ISU says these are strictly matters of personal choice, but cobwebs do have a great deal of healing power for dehorning wounds and in other cases where coagulation is a problem. Clean creek mud has helped sterilize many a pony's barbed-wire slash.

HORSEHAIR SNAKES

The old horsehair snake trick has impressed as many small boys as the steam thresher whistle. Here is the factual explanation from Entomologist Harold Gunderson: The "snake" is simply a tiny nematode that is carried into the water by a mixed up June beetle or thirsty grass hopper. The insect dies but the nematode emerges. Sometimes it grows to the length of 18 to 20 inches; thus giving the practical joker wriggling proof that a mare's tail is a goodly bundle of snakes when properly watered.

Some folks swear that full-fledged snakes can break into pieces when they're

being chased—the sections then taking different routes and becoming separate snakes. "Highly unlikely," says Dr. Gunderson. Some lizards do have the ability to lose their tails and sprout new ones; but a severed snake's just plain gone.

HOW TO CURE OR KILL

You may shear your sheep when elder blossoms peep," is the poetic reminder of Nebraska sheepmen. This is sound advice, but many other livestock remedies are less lyrical, still workable.

Turpentine poured into the funnellike ear of a down hog is considered an all-purpose tonic by some old-guard hogmen. And Dakota ranchers consider bacon and eggs (uncooked, that is) surefire for curing calf scours. Animal disease experts concede such witches' brews would cure almost anything, but they still favor antibiotics. One practicing, but anonymous, veterinarian does recommend a mixture of whiskey and warm water to take the chill off a newly dropped calf. And a veterinarian reports off the record that ordinary rubbing alcohol poured in a shook-up, laboring sow's ear will do as a tranquilizer.

SOIL SORCERY

Plant crops, flowers and gardens when the weather and soil conditions are right, is the advice of USDA agronomists. They find little germination or growing value in planting by signs. But the emerging oak leaf gets the scientific nod. "When the oak leaf is the size of a squirrel's ear" is still a pretty good starting gun for Midwest corn planters.

Heavier plant population is considered a recent wrinkle in corn-raising circles, but the Indians planted four kernels in a hill, honoring the four cardinal points of the compass. The Pilgrims were not to be outdone. They planted five; one for the blackbird, one for the crow, one for the cutworm, and two to grow.

And water from nature's own faucet gives crops a boost that irrigation water doesn't—just as old-timers claim. Falling rain dissolves the nitrate in the air and deposits it in the soil.

WATER WITCHES

The subject of water brings us to the granddaddy of all rural voodoo—water dowsing. This topic alone can cause more arguments than an election year promise. Several Nobel Prize winners and physicists endorse this mysterical

ous method, but the U. S. Geological Survey has little time for the forked stick as an underground water probe. Arthur M. Sowder, Extension Forester for the USDA, claims dowsing is his interesting and workable off-the-job hobby.

Kenneth Roberts in his book Henry Gross and His Dowsing Rod, says, "not all the derision of all the geologists in the world can in any way alter the unfailing acturacy of the dowsing rod in Henry Gross' hands."

Every divining rod devotee will agree,

but if a man doesn't have the gift (and only 1 in 1,000 does) the flexible peach, willow, or ash limb won't point to the cistern he's standing on. To the believer and successful practitioner, dowsing for water is a science—a profession.

AGONY OF A FRUIT TREE

Another off-beat rural remedy is that of hammering nails into a barren tree to produce blossoms. An Iowa man



whose 14-year-old fruit tree was loaded with leaves but nary a blossom checked with university agronomists. They diagnosed the trouble as a lack of mineral and gave him an unofficial go-ahead on the hard-boiled home remedy. The tree sprouted blossoms the first year after he filled the trunk with nails and the ground at the base with old tire chains. It survived the injection and continues to bear fruit every year. Sometimes the cure is more logical than weird.

Science continues to find new promise in old theories. Streptomycin is made by growing a certain organism in broth containing soybean meal, as are the new disease fighters—nitrofurrins. Onion and garlic fumes kill bacteria, also romance.

Science is not based on folklore, but its basic research often begins there.