



### Bears and Men

➤ BEARS have always had a strangely close association with human history. Even before history, contact between men and bears must have been close and frequent—too much so for the comfort of the human beings, at times; at others, too much so for the comfort of the bears. For primitive man used as shelters exactly the kind of caves that the long-extinct giant cave bears also wanted for homes. So even with the crude weapons at their command, cave men killed cave bears; bear bones and primeval flints are found together by thousands, buried in the floor litter of the ancient caverns. Presumably the bears got the better of the argument, too, sometimes.

Reviewing the association of bears and men in Europe, in the British archaeological journal *Antiquity*, Colin Matheson calls attention to hints of bear cults in ancient religions, beginning with the possibility that the cave men who killed the bears also revered them, as some primitive tribes still do. The bear figured prominently in the worship of Artemis (Diana) in parts of ancient Greece; it is suggested that originally the goddess herself was a bear, and that her role as a maiden huntress was a later, more sophisticated development.

Considering how much more intimately cave bears were associated with early man than were the wild dogs of his time, it may be conjectured that the bear missed becoming the first domesticated animal only because of his stupidity and untamability. Had he been intelligent, like the dog, or even docile without being intelligent, like the sheep, the bear might have been man's first pet, his first animal servant. We might

today have watchbears in our kennels, perhaps even miniature lapbears lolling on cushions in the boudoirs of fashionable dowagers.

The wild bear that thus missed becoming a tame bear was quite distinct from existing bear species, in both Old World and New. It was a big animal, but shaped rather differently from the European brown bear and the American black and grizzly bears; and it had a decidedly shorter nose. It became extinct at some time near the end of the Ice Age, more probably because of disease than through the persecutions of human hunters. At any rate, many of the bones found in the caves are defective or malformed.

The European brown bear, which succeeded the cave bear, was once abundant on the Continent as well as in the British Isles. Bears were used, hundreds at a time, in bloody spectacles in the Roman arena. They were hunted all over Europe during the Middle Ages. They became extinct in Britain first, about the ninth century; in the populated parts of France, Germany and other mainland countries they survived much longer. There are some still to be found in the Pyrenees, Carpathians and other wilderness-covered mountains of the Continent.

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#### NUTRITION

### Concentrated Protein Extracted From Grass

➤ A HIGH-PROTEIN feed obtained directly from grass by chemical extraction is suggested as a possible substitute for war-scarce "concentrates" like grain and oil meal in livestock feeding, by Dr. T. J. Sullivan of the U. S. Regional Pasture Research Laboratory. In an issue of *Science* (Oct. 22), Dr. Sullivan tells of preliminary small-scale experiments along this line which he has performed.

In one of them, he soaked dried ground grass overnight in a solution of caustic soda, then filtered it through cheese-cloth and treated the liquid with hydrochloric acid. He dried and ground up the precipitate thus formed.

The dried substance was dark green in color, with a grassy flavor. On a dry-weight basis it contained 58% protein, 6% minerals and less than 1% lignin and cellulose—roughage, in feeding terms. Dr. Sullivan calculates that a ton of dried grass would yield about 285 pounds of this protein "concentrate."

The grass residue, still containing 44% of the original protein "appeared to be a fair quality stock feed."

Dr. Sullivan suggests that "either the crude or the extracted product could be made from surplus forage, or forage otherwise wasted, and if economically produced should be useful in supplementing present stocks of protein concentrates, particularly for poultry and hog rations."

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#### ORDNANCE

### Peepsight for Firearms Patented by Garand

➤ MILITARY inventions are well represented among the new patents recently issued. Prominent among these is a rear peepsight for firearms invented by the noted gunsmith, John C. Garand of the government arsenal at Springfield, Mass., covered by patent 2,331,903.

The gunsight consists basically of an L-shaped member, mounted on the barrel by means of a transverse hinge. Each arm of the L is pierced by a peepsight aperture near its upper end. The two arms are unequal in length, so that two quickly adjusted elevations are possible on the weapon. This is essentially the sight used on the new Army carbine. Royalty-free rights for manufacture and use are assigned to the U. S. government.

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#### AGRICULTURE

### Better Machine Harvester For Sugar Beets Invented

➤ THE GROWERS of sugar beets may soon dispense with more of the hand labor now used in harvesting the beets by use of an improved machine harvester. The horse- or tractor-drawn implement carries a plow-like lifter which penetrates the ground below the beets and raises them to the surface, shaking out the earth. The machine cuts off the beet tops, and separates the foliage from the roots. It is somewhat similar to mechanical potato diggers used in potato-raising sections. The improvements relate particularly to better automatic action.

The patent (No. 2,331,520) was granted to William E. Urschel, Valparaiso, Ind., who claims the machine may be used with other root crops.

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