"inventor" holds that his marked docility is due largely to the fact that the unicorn knows his own strength and the superiority in combat that his single weapon gives him; full self-confidence has done away with truculence.

Dr. Dove has searched the literature of unicorn lore, which is both ancient and voluminous. He is strongly inclined to believe that earlier peoples anticipated him in his unicorn-making surgery, and that they produced leader animals for their herds in this way. One passage in Pliny, noted naturalist of Roman times, indicates that ancient herdsmen operated on the horn buds to produce multiple-horned beasts. Other more modern references indicate that shepherds in the Himalayan state of Nepal made unicorns of rams, and that two African peoples knew the secret of unicorn cattle.

Everywhere in ancient literature, both Biblical and classic, the unicorn is credited with great strength, great nobility, and great independence. He is always the leader of the beasts. His single horn, tipped with red or black, is the symbol and source of his power. He rules the others with it; he dips it into pools of undrinkable water and takes away the poison. Yet he is gentle, so that he will obey even a young girl. Later legend stressed this point, until it was claimed that only a virgin could tame a unicorn.

The unicorn is mentioned three times in the Old Testament, always in terms of high esteem. Indeed, the first reference, in the Book of Numbers, likens the unicorn even to God. Balaam, the heathen prophet who ran full tilt into the power of Jehovah, and of course got the worst of it, reported back to his king: "He hath as it were the strength of an unicorn!"

Dr. Dove's own bovine unicorn, and his belief that similar animals were formerly created in numbers as herd leaders, receives apparent Scriptural support in the book of Job. God asks his sick and complaining servant:

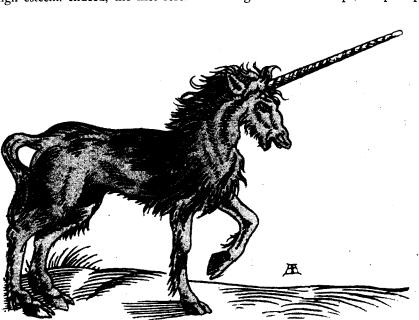
"Canst thou bind the unicorn with his band in the furrow? or will he harrow the valleys after thee? . . .

"Wilt thou believe him, that he will bring home thy seed, and gather it into thy barn?"

Such farm work was ox-work, and not to be demanded of the proud herd leader.

There is another story, not in the Bible but in the Jewish Talmud, about Adam sacrificing a "unicorn" to God. As Dr. Dove interprets this legend, it may well signify that Adam offered up absolutely the most valuable thing that he possessed, the finest sire in his herd.

The strange unicorn of heraldry appears to be a late invention, compounded of several animals, presumably to symbolize his several high nobilities: head, neck, and legs of the horse; hoofs and beard of the goat. The single twisted horn sprouting from the middle of his forehead was rather like that of a straight-horned antelope, or perhaps



A MYTHICAL BEAST

The traditional unicorn of heraldry was a composite animal made up of the virtues of several different animals.



NOT MYTHICAL NOW

A scientist has created this true unicorn and lifted this creature of fabulous virtues from the pages of legend into the world of modern reality.

the nose-horn of a narwhal, which is a porpoise-like sea creature.

This creature of the later Middle Ages did not attain his proud position on the English coat-of-arms until the Scottish-born James I put it there. So that "the lion and the unicorn, a-fighting for the crown" have been the property of nursery children only since the time when Shakespeare, a portly, baldish, middle-aged retired playwright, lived out his sunset days in his native Stratford-upon-Avon.

Science News Letter, May 16, 1936

BACTERIOLOG

## Neglected Lowly Plants Source of Soil Wealth

NE-CELLED green plants of the class known as algae, usually neglected in studies of soil fertility, are an indispensable factor in making the soil productive, is the claim of Prof. Rudolf Gistl, of the Munich Technical School. In certain types of soil, Prof. Gistl says, these lowly plants are the chief source of energy-food for the nitrogen-fixing bacteria that enable profitable crop plants to grow.

Prof. Gistl even envisages the possibility of making sterile soils fertile by inoculating them with proper mixtures of algae and nitrogen-fixing bacteria.

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