



### Question of Support

**B**RONTOSAURS and their ponderous kin-reptiles were the biggest animals that ever lived, with the sole exception of modern whales. They were easily the biggest beasts that ever walked on legs. They reached lengths of 70 or 80 feet—what with their tremendously long necks and interminable trailing tails—and they probably weighed 50 or 60 tons apiece.

That enormous bulk of body is what makes them such a puzzle to scientists. How did even their big-boned legs support it?

It isn't likely that they squattered along on their bellies, like present-day alligators and lizards. The position of their leg-joints doesn't indicate spraddle-legged locomotion, and anyway, it would probably have been an impossible job dragging such bodies over the ground. Those tremendous tummies just presented too much brake surface.

For a fully upright position their legs, pillar-like as they are in their bony structures, don't seem quite reasonable, either. A weight of 50 or 60 tons is a lot for any set of pillars to support, particularly if they have to move it about. And move about, of course, is what the great saurians had to do, just as cattle and horses do today. The brontosaurus and their relatives were all vegetarians, and although their long necks would enable them to stand (or squat) still and clear all the vegetation from a 60-foot circle, they would have to move on pretty frequently, because it must have taken super-elephantine quantities of fodder to stoke their cavernous insides.

One suggested solution for the dinosaur's freight problem is that they were animals of shallow lakes and deep marshes. The whales can live because

their immense bodies are buoyed up by the water. Why not put the dinosaurs on the bottom with only their heads and maybe the tops of their backs sticking out above the surface, and let them browse on the lush vegetation in the shallow water and overhanging the banks?

That sounds reasonable enough. The suggestion moreover receives considerable support from the discovery of a big saurian skull with the nostrils away up at the top of the head, just where they should be to enable the animal to

breathe while feeding with its mouth submerged.

This does not necessarily mean, of course, that the big reptiles never come ashore. Modern alligators and crocodiles make considerable overland journeys from one lake to another, and hippopotamuses are dreadful nuisances to African farmers several miles from the nearest "hippo" haunts. So maybe the saurians lived at ease in the ooze most of the time, and waddled ashore when the whim seized them.

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### GEOLOGY

## Bruised Cow Mute Witness Of Fall of Meteorite

### Is Apparently Only Instance of Living Creature Injured by "Falling Star"; Several Fragments Found

**S**TONES have hit cows probably millions of times, flung from the fists of bad little boys; but a stone that fell near Chicora, Pa., seems to have been the only missile that has ever hurtled down from the blue sky to bruise a poor Bossy into a bellow of indignation.

The story was told by a Pennsylvania scientist who has a modesty so ingrowing that he won't permit his name to be mentioned, when he brought two stony meteorite fragments to the Smithsonian Institution for petrographic analysis.

One stone, about the size of a man's fist, was found in the chicken-yard of a Chicora farmstead. The farmer, sitting on his porch at the end of the day's work, heard what he took to be an airplane overhead, and at the same time a mighty uproar among his hens. Next day he found the stone.

A little distance away he found a second, similar stone. Also, one of his cows had an unaccountable wound, which had to be treated by a veterinarian. Since she can't talk, she couldn't accuse a strange piece of rock of hurting her. But scientists have their strong suspicions.

At any rate, the farmer can count himself lucky, for the two stones are undoubtedly meteoritic, and probably represent fragments of a bigger mass that burst overhead after a fiery transit through the earth's atmosphere. Meteoritic bombing from outer space is not to be taken lightly.

The scientist who won't tell his name started a bit of celestial detective work.

With the aid of an artillery officer to calculate angles, he quizzed everybody he could find who had seen the fiery projectile tear through the heavens.

Time was an important factor in his calculations, but unfortunately very few of the witnesses had glanced at their watches—they had been too excited. However, many of them were farmers, who were sitting listening to their radios when the strange visitor swept over the horizon, and they remembered what programs they had been enjoying. (Long before Orson Welles scared us with Martian meteorites!) This permitted a fairly close time-check.

Finally the scientist was able to calculate the point of fall with considerable accuracy. He located the Chicora farmer, induced him to part with his sky-stones for the sake of science, and sent them to the Smithsonian where there is proper apparatus to prepare them for analysis. He still hopes to locate other pieces of the exploded meteorite. It is quite possible, for example, that the injury to the cow was caused by a third fragment, still unbound.

Although the Cow of Chicora seems to be the only living creature who can lay claim to the distinction of having been hit by a stone flung from the sky, there are cases on record where houses, barns, and other structures have been struck by meteorites. There is no well authenticated case, however, of injury to a human being from that cause.

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