



Leviathan's I.Q.

► HOW INTELLIGENT is a whale?

The author of "Moby Dick," who had sailed on an old-time New England whaling vessel, portrayed that great white whale as having almost human qualities in terms of will and reasoning. In general, however, it must be admitted that scientists know little of the mental capabilities of the great whales.

There is quite a bit of evidence of a comparatively high degree of mental attainment on the part of the smaller whales—the friendly porpoises or dolphins. Scientists have been able to study these sea-going mammals at close quarters, for example, in the great tanks at Marineland, Fla.

In general, they agree that captive porpoises display intelligence on a par with or above that of the dog.

The Marineland porpoises have been trained to do a great variety of tricks, to the delight of tourists and the benefit of scientists studying their behavior. More important, perhaps, are apparently intelligent acts carried out by the porpoises without their being trained.

Here is an example of such "intelligent" behavior. A number of bottle-nose dolphins (porpoises) had been captured for the "Liv-

ing Sea" oceanarium at Ft. Walton, Fla., and were being transferred from the deck of a boat into a pen. Three were already unloaded, but as the fourth was lifted he struck his head. Stunned, the porpoise fell into seven feet of water and sank immediately.

Two of the porpoises already in the pen quickly swam to their unconscious companion. Each placed his head under a flipper of the injured porpoise and together they raised him to the surface in an apparent effort to allow him to breathe.

The two "good Samaritans" had to leave the stunned porpoise from time to time in order to get their own breath, but they continued to come to his aid until he could swim away on his own steam.

There is some danger in calling such acts "intelligent," since the line between instinctive actions and reasoning in animals is far from being clearly drawn, but those who know the likable porpoises are apt to disregard such a cautious stand and to say that porpoises rate a high I.Q. in the animal world.

Who, then, can rate the I.Q. of the giant whales of the ocean depths?

Science News Letter, July 14, 1956

## HEMATOLOGY

## Find Antidote for Anti-Blood Clotter

► DISCOVERY of a drug to reverse the anti-blood clotting effect of heparin has been announced by Drs. Frederick W. Preston, Robert Hohf and Otto Trippel of Northwestern University School of Medicine.

The drug is called polybrene. It might be used, the doctors point out, for patients who had been getting heparin to prevent further blood clots after heart attacks or strokes and who suddenly needed an operation. Giving polybrene would promptly restore the normal clotting mechanism of the blood, so there would not be hemorrhage during the operation.

Heparin is a chemical found naturally in the body that prevents blood from clotting. Sometimes the heparin mechanism is disturbed and abnormal bleeding occurs, such as in hemorrhage after birth, in leukemia, or bleeding under the skin that causes bruise-like purple patches.

In such cases, antiheparin agents such as polybrene are useful to neutralize the misbehaving heparin, so that the blood can clot and stop the bleeding.

Polybrene is "similar in most respects" to two other anti-heparin drugs, protamine sulfate and toluidine blue, but "polybrene is more potent than either," the doctors report. "It is stable and may be stored for long periods of time."

The drug's prompt heparin-reversing action showed in studies of 33 patients at the Veterans Administration Research hospital where Dr. Preston is chief of surgical services. The studies are reported in the *Quarterly Bulletin* of the Northwestern University Medical School.

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## AGRICULTURE

## Grain-Sorghum Hybrids Increase Yields 30%

► HYBRID VARIETIES of grain-sorghums produce 20% to 30% better yields than standard varieties, U. S. Department of Agriculture tests have shown.

Farmers are expected to change over to the new hybrids as soon as enough seeds become available, which should be about 1958.

Development of grain-sorghum hybrids has been slower than similar development of corn. Department of Agriculture agronomists say the new grain-sorghums have the same production efficiency as corn hybrids of 25 years ago.

The new hybrids, some of which have already been tested in seven states, are likely to become more important as a feed crop. In many areas they can serve as alternate crops for land diverted from wheat or cotton. Hybrids for which seed is now available can be grown in the southwestern section of the corn belt and throughout much of the grain-sorghum growing areas. Agriculture experts say by 1958 farmers will have several kinds of hybrids to choose from.

Horticulturists are now working to develop a grain-sorghum hybrid more nutritious and able to resist mold during rainy fall weather.

Science News Letter, July 14, 1956

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