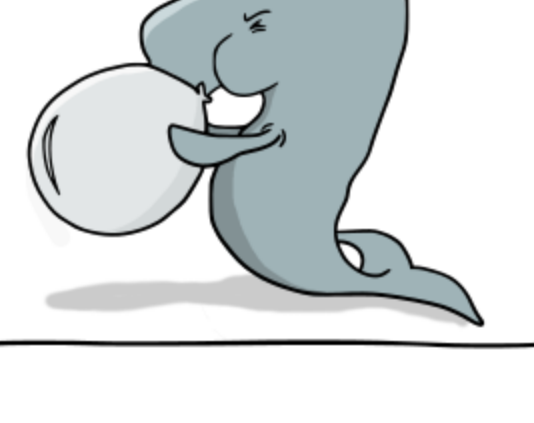


# SQUEEZING THE SPERM

## HOW THE SPERM WHALE GOT ITS NAME

THE SPERM WHALE, THE WORLD'S LARGEST PREDATOR ONCE THOUGHT A FEARSOME MONSTER, NOW CONSIDERED A PLACID OCEAN GIANT.

THEIR OFFICIAL NAME, *PHYSETER MACROCEPHALUS*, MEANS "BIG-HEADED BLOWER". THOUGH HISTORICALLY THEY WERE ALSO KNOWN BY THEIR FRENCH COMMON NAME, CACHALOT.



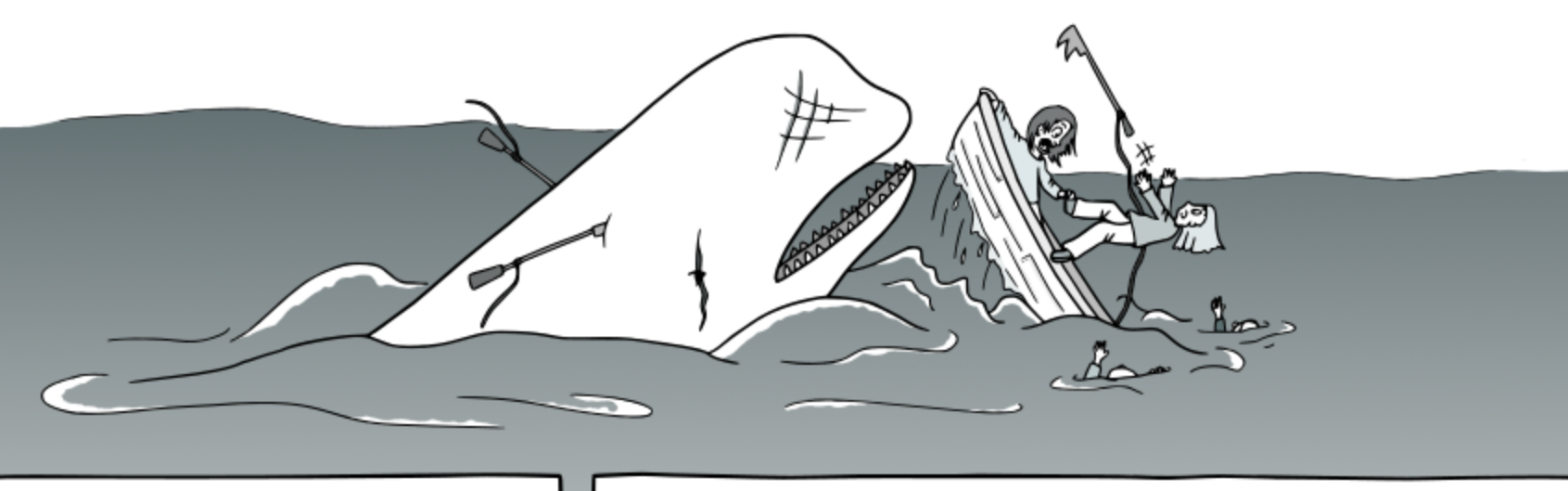
THEY HOLD SPECIAL SIGNIFICANCE IN THE HISTORY OF WHALING, IN NO SMALL PART DUE TO HERMAN MELVILLE'S 1851 CLASSIC, *MOBY DICK*



A NOVEL BASED ON THE TRUE STORIES OF THE SINKING OF THE SHIP "THE ESSEX" BY A SPERM WHALE IN 1820



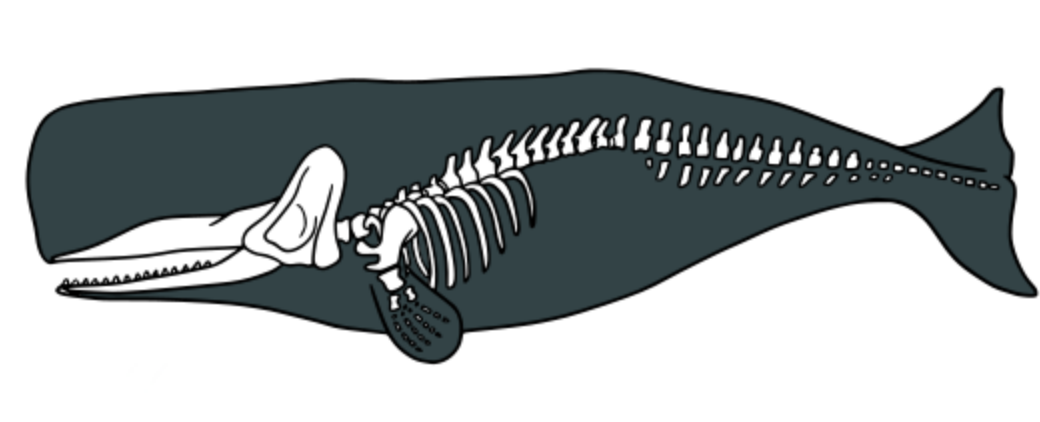
AND THE SIGHTINGS OF AN ALBINO SPERM WHALE, KNOWN AS "MOCHA DICK", IN THE 1830s.



THEY HAVE A SOMEWHAT UNUSUAL APPEARANCE. IN FACT LYDEKKER, IN HIS 1894 ROYAL NATURAL HISTORY, REFERRED TO THEM AS...

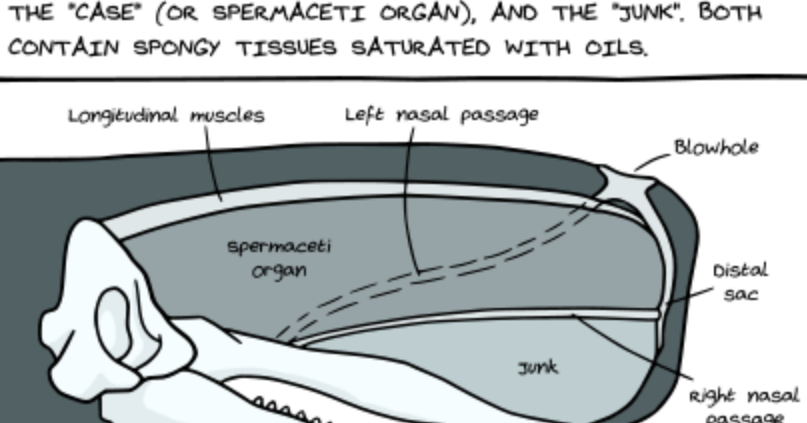


INDEED, THE SKELETON, THE SKULL IN PARTICULAR, SCARCELY SEEMS TO REPRESENT THE LIVING ANIMAL.



"THE WHALE, LIKE ALL THINGS THAT ARE MIGHTY, WEARS A FALSE BROW TO THE COMMON WORLD"

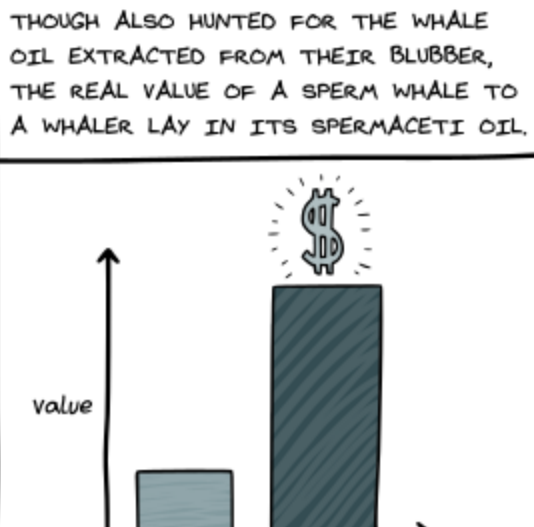
THIS IS DUE TO THE TWO HUGE STORES OF FLUID THE WHALE CARRIES IN ITS HEAD. THESE VAST RESERVOIRS, KNOWN AS THE "CASE" (OR SPERMACETI ORGAN), AND THE "JUNK". BOTH CONTAIN SPONGY TISSUES SATURATED WITH OILS.



WHEN COOLED, THIS MIXTURE CONGELS TO A THICK, WHITISH, OILY WAX, WITH A SUPERFICIAL SIMILARITY TO SEMEN. AND INDEED, THIS IS WHAT EARLY WHALERS THOUGHT IT WAS. SO THE OIL WAS NAMED SPERMACETI, AND THE WHALES WERE CALLED SPERMACETI WHALES. LATER ON THIS WAS SHORTENED TO "SPERM WHALE".



THOUGH ALSO HUNTED FOR THE WHALE OIL RATHER THAN THEIR BLUBBER, THE REAL VALUE OF A SPERM WHALE TO A WHALER LAY IN ITS SPERMACETI OIL.



SPERMACETI HAD MANY USES, FROM PERFUMES TO MEDICINE.



PREPARATIONS OF SPERMACETI WERE USED TO TREAT A WIDE VARIETY OF CONDITIONS, INCLUDING ASTHMA, COUGHS, COLDS, CHAPPED LIPS, AND RELIEVING THE DISCOMFORT AFTER CHILDBIRTH.



IT WAS EVEN ALLUDED TO BY SHAKESPEARE - "THE SOVEREIGN'ST THING ON EARTH WAS SPERMACETI FOR AN INWARD BRUISE" (HENRY V).

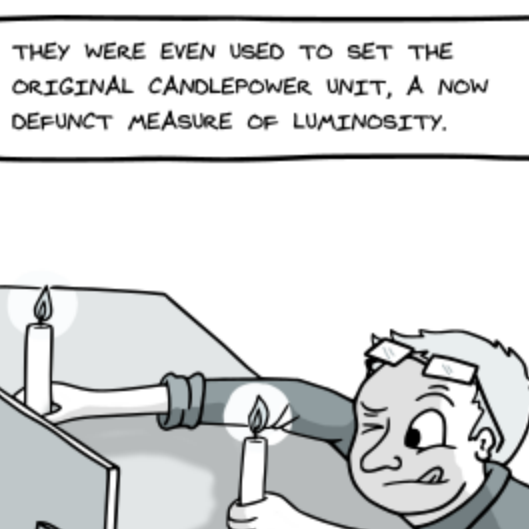
ITS PRIMARY USE HOWEVER, WAS IN CANDLE MAKING. SPERMACETI CANDLES BURNED LONGER, CLEANER, AND BRIGHTER THAN ANY OTHER CANDLES AVAILABLE IN THE 18TH AND 19TH CENTURIES.



THE DANGERS OF COLLECTING THE SPERMACETI, AND THE SIGNIFICANT AMOUNT OF TIME TAKEN TO MAKE THE CANDLES, MEANT THEY WERE LUXURY ITEMS, WELL BEYOND THE REACH OF ALL BUT THE EXTREMELY WEALTHY.



THEY WERE EVEN USED TO SET THE ORIGINAL CANDLEPOWER UNIT, A NOW DEFUNCT MEASURE OF LUMINOSITY.



AFTER THE WHALE WAS CAUGHT AND KILLED, A HOLE WAS DRILLED INTO THE SIDE OF ITS HEAD SO THE SPERMACETI COULD BE LADLED OUT IN BUCKETS.



AN AVERAGE SIZED SPERM WHALE COULD PRODUCE UP TO 500 GALLONS OF OIL, WHEREAS LARGER WHALES COULD HAVE AS MUCH AS 900 GALLONS. THE TASK COULD TAKE SEVERAL DAYS TO COMPLETE.

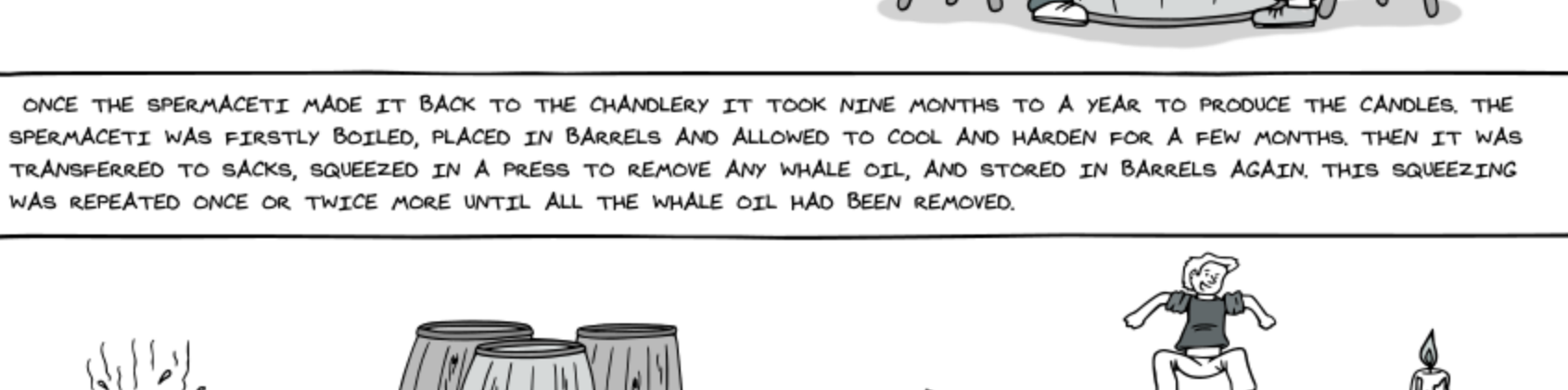


THE SPERMACETI FLOATS IN WHALE OIL, AND CONGELS WHEN IT STARTS TO COOL SO THE SPERMACETI WAS SQUEEZED BY HAND TO SEPARATE IT FROM THE WHALE OIL.

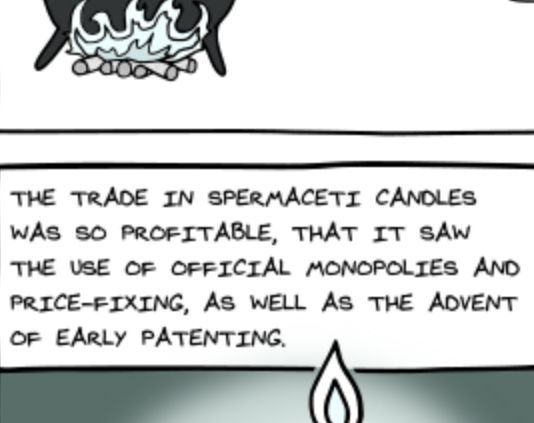
"SQUEEZE! SQUEEZE! SQUEEZE! ALL THE MORNING LONG; I SQUEEZED THAT SPERM UNTIL I MYSELF ALMOST MELTED INTO IT; I SQUEEZED THAT SPERM TILL A STRANGE SORT OF INSANITY CAME OVER ME; AND I FOUND MYSELF UNWITTINGLY SQUEEZING MY CO-LABORERS' HANDS IN IT, MISTAKING THEIR HANDS FOR THE GENTLE GLOBULES".



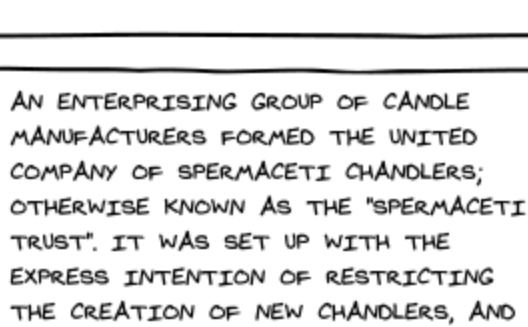
ONCE THE SPERMACETI MADE IT BACK TO THE CHANDLERY IT TOOK NINE MONTHS TO PRODUCE THE CANDLES. THE SPERMACETI WAS FIRSTLY BOILED, PLACED IN BARRELS AND ALLOWED TO COOL AND HARDEN FOR A FEW MONTHS. THEN IT WAS TRANSFERRED TO SACKS, SQUEEZED IN A PRESS TO REMOVE ANY WHALE OIL, AND STORED IN BARRELS AGAIN. THIS SQUEEZING WAS REPEATED ONCE OR TWICE MORE UNTIL ALL THE WHALE OIL HAD BEEN REMOVED.



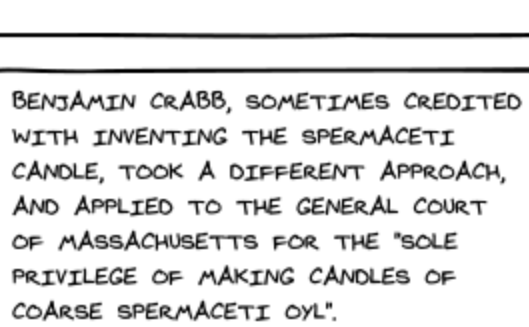
THE TRADE IN SPERMACETI CANDLES WAS SO PROFITABLE, THAT IT SAW THE USE OF OFFICIAL MONOPOLIES AND PRICE-FIXING, AS WELL AS THE ADVENT OF EARLY PATENTING.



AN ENTERPRISING GROUP OF CANDLE MANUFACTURERS FORMED THE UNITED COMPANY OF SPERMACETI CHANDLERS; OTHERWISE KNOWN AS THE "SPERMACETI TRUST". IT WAS SET UP WITH THE EXPRESS INTENTION OF RESTRICTING THE CREATION OF NEW CHANDLERS, AND PREVENTING THE WHALERS FROM ARTIFICIALLY INFLATING THE PRICE OF THE OIL.



BENJAMIN CRABB, SOMETIMES CREDITED WITH INVENTING THE SPERMACETI CANDLE, TOOK A DIFFERENT APPROACH, AND APPLIED TO THE GENERAL COURT OF MASSACHUSETTS FOR THE "SOLE PRIVILEGE OF MAKING CANDLES OF COARSE SPERMACETI OIL".



THE REAL REASON THAT THE SPERM WHALE CARRIES SUCH RESERVES OF OIL IN ITS HEAD IS STILL SOMEWHAT OF A MYSTERY.

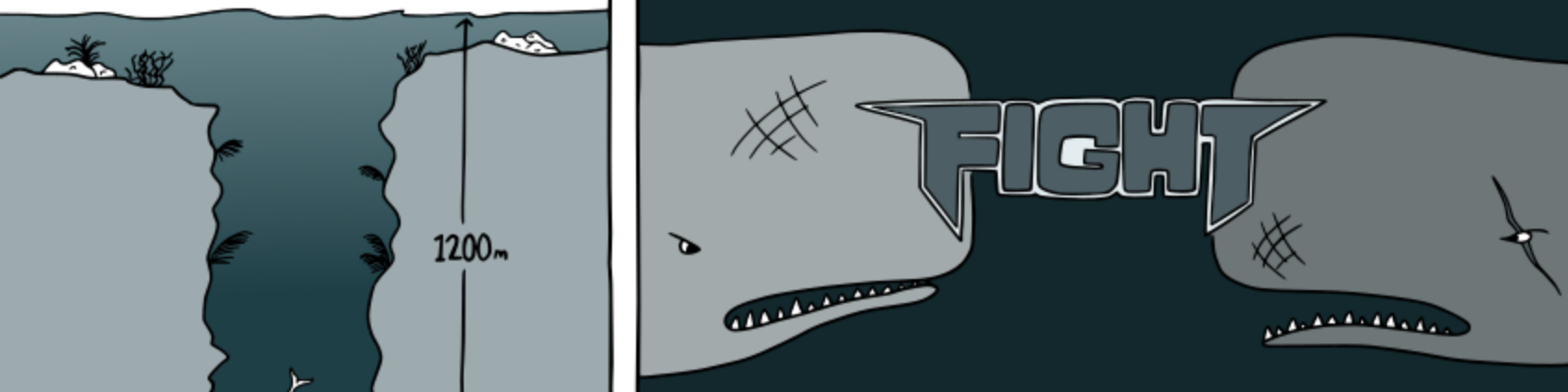
THE OIL HAS BEEN THOUGHT TO ACT AS A BUOYANCY AID, TO HELP THE WHALES DIVE TO AND RISE FROM SUCH IMMENSE DEPTHS DUE TO THE CHANGE IN VISCOSITY WITH TEMPERATURE.



AND WAS ALSO HYPOTHESIZED TO HELP THEIR HEADS ACT LIKE BATTERING RAMS, TO ALLOW MALES TO FIGHT OFF RIVALS.



HOWEVER, THE MOST POPULAR THEORY IS THAT THE SPERMACETI ORGAN HELPS TO PROPAGATE THE SOUND OF THE WHALES' CLICKS THROUGH THE WATER, ALLOWING THEM TO COMMUNICATE OVER VAST DISTANCES.



DR JONES

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