• New Machines and Gadgets •

For addresses where you can get more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St., Washington 6, D. C., and ask for Gadget Bulletin 636. To receive this Gadget Bulletin without special request each week, remit $1.50 for one year's subscription.

TV ANTENNA for all television channels, both VHF and UHF, makes it unnecessary to have two antenna installations on housetops, and works from metropolitan to fringe areas. The antenna is available in a single stack, or in two or four stacks. It uses printed-circuit filters to separate the portions of the TV range.

Science News Letter, August 23, 1952

ENAMEL FOR all types of window screens is brushed or rolled onto the wire mesh without clogging, protecting them from rust or from oxidation. Available in green, copper-tone and black, the enamel also is suitable for coating the screen frames.

Science News Letter, August 23, 1952

THERMOMETER WITH "adjustable stem" can be raised and lowered in a flask without dismantling the equipment. Working something like a trombone, the thermometer is made in 6½- and 11½-inch lengths, and with scales of 0-150, 0-250 and 0-360 degrees Centigrade, the figures being etched into the glass.

Science News Letter, August 23, 1952

PORTABLE JACK, operated from air compressed to at least 80 pounds per square inch, can lift ends of cars and trucks so that mechanics can get at the job easily. An

automatic safety lock holds the lift at any of its ten working heights, one of which is shown in the photograph.

Science News Letter, August 23, 1952

ALL-PURPOSE SCREWDRIVER has a hollowed fluted handle made of a transparent blue-colored plastic. Closed with a screw-on cap, the handle acts as a storage chamber for extra bits. The bits are locked into place on the "business end" of the screwdriver by a knurled nut.

Science News Letter, August 23, 1952

MAGNIFYING GLASS for industrial use has a light bulb built into its handle to illuminate the object being viewed. The light can be operated from batteries or from a 110-volt power source, depending upon the type of handle specified. The instrument's lens system magnifies five times.

Science News Letter, August 23, 1952

BLASTLESS BLAST burner mixes fuel gases within the burner before igniting them, thus permitting the burner to operate quietly, almost silently. Simple valve adjustments produce large or small sealing and annealing flames. They also control the flame so that soft glass, Pyrex, Vycor, or even quartz, can be worked.

Science News Letter, August 23, 1952

TELEPHONE WIRE, designed for use in residences and offices, improves telephone performance and blends inconspicuously with baseboards or trim. Consisting of insulated conductors entirely enclosed in an ivory- or brown-colored plastic jacket, the wire can be stapled into position easily.

Science News Letter, August 23, 1952

• Nature Ramblings •

Toothy Aristocrats

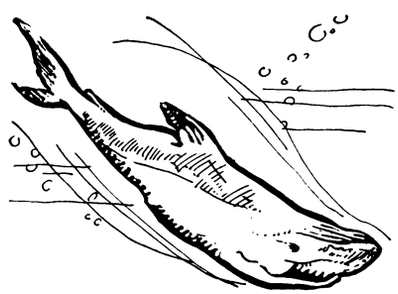
➤ THE FRIENDLESS estate of sharks is not a matter of their being parvenus. If length of lineage were the only criterion, sharks would have to be reckoned among the highest aristocracy among backboned animals.

There were sharks in the sea long before any kind of vertebrates came to live on land, and they were recognizable as sharks when other fish seemed to be uncertain whether they were going to be fish at all.

Sharks set themselves up in the aristocrat business as many another family has done in later time: by having good weapons and using them ruthlessly.

Sharks' teeth are so efficient, indeed, that many island tribes in the South Seas, having no metals or hard stones, made their wooden war clubs the practical equivalent of swords by edging them with these three-cornered dental daggers.

The primitive shark tooth is a triangle,



with cutting edges finely sawtoothed. Loosely attached at the base it comes loose readily if damaged by an over-ambitious bite, and falls out after a time in any case.

There are plenty of replacements; most sharks have several rows of unerupted teeth in their jaws, waiting their turn. There are variants upon this pattern, but all recognizable as belonging to the family.

So much notice has been taken of the teeth of the sharks because they strongly present the shark's chief function—that of an eating-machine. A shark is always hungry, and he is always hunting.

Sharks sometimes hunt in small packs, like wolves, and like wolves will turn and rend and devour any member of the pack that gets hurt.

For all their horrid appearance and unappealing ways, sharks have a decided place of their own in the world. Like the wolves to which they are often likened, they keep down the surplus of the teeming life of the sea, and, since their appetites are anything but finicky, they are at once garbage collectors and living incinerators.

Science News Letter, August 23, 1952