

of public instruction and minister of the interior, and was made minister to the United States. While in his diplomatic post in Washington, he was made president of the Argentine Republic, in 1868. It was through him that American ideals in education were brought to the Argentine. He also founded the Cordoba Academy of Science, an important scientific institution in Argentina.

Science News Letter, October 11, 1941

ENGINEERING

Anti-Aircraft Gun Mount First Built By Industry

See Front Cover

THE FIRST 90 millimeter anti-aircraft gun mount to be built by private industry in the United States has been completed in the shops of the Allis-Chalmers Manufacturing Company. This gun can shoot an explosive shell nearly seven miles up into the air, which is higher than most bombers can fly. Workmen, putting the finishing touches on the gun mount just ten minutes before its presentation to the United States Army, are shown on the front cover of this week's Science News Letter.

Science News Letter, October 11, 1941

An 800,000-word handbook of Federal *Indian Law* has been prepared by the Government.

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New Machines And Gadgets

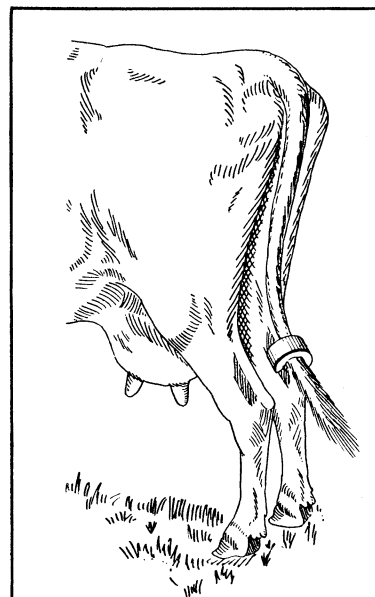
Novel Things for Better Living

The back seat of a motor car is too narrow to stretch out on comfortably, even in the new extra wide models. But diagonally there is room and everything would be fine, if only there were something to rest your feet on. This need is now supplied by an invention recently patented. It is a sort of auxiliary seat on the order of a Morris chair, which rests on the original seat but fits snugly into the corner, and has a long footrest stretching diagonally across the rear compartment of the car.

The home mechanic who, in attempting to do some soldering, has often felt that he needed three hands, one to hold the soldering iron, another to hold the solder, and a third to hold the work—a job for a man and a half, too much for one, not enough for two—will welcome a solder feeding device that has recently been patented. It can be attached to any soldering iron, takes an ordinary spool of solder wire and guides the latter to the tip of the iron. A little push on a lever provides fresh solder as needed.

Air cooled by a spray of cold water is the method used in a simple air-conditioning device on which a patent has recently been granted. But what about the moisture that is thus added to the air? That matter has been taken care of by this device. The air after spraying passes into a rapidly revolving cylinder where the moisture-laden air is thrown outward to the walls of the cylinder and passes out through openings therein. Only the relatively dry air in the middle is drawn off for cooling.

This cow tail holder prevents the cow from swishing the milkmaid or man in the face. However, she can still kick the pail. The device, on which a patent has been granted, consists of a clip of soft resilient material (rubber to



you) in which a metal spring is buried, so that the tail can be clipped to a tendon of the cow's leg. Undoubtedly the milkman and the flies will be in favor of this arrangement, but we have yet to hear from the cow.

If curved windshields are ever applied to automobiles—and this would be very desirable because they would not flash the sunlight into other people's eyes—a difficult little problem would arise in the windshield wiper. However, this has already been solved by a recently patented wiper which is mechanically so arranged that the curvature of the wiper is modified, as it swings to and fro, in such a way as to follow that of the windshield.

Chemical icicles are used on many of Hollywood's movie sets. The icicles are made of cellophane and water glass—the substance used to preserve eggs. After being shaped they are dipped in alcohol, which solidifies them, and then in paraffin. The latter forms a coating which melts under the heat of the spotlights, giving a very realistic effect of icicles slowly melting.

A phonograph needle having a large, rounded sapphire tip has recently been granted a patent. It is said to reduce the needle scratch because it rides on the well-formed top of the record groove, never on the noisy bottom. For this reason, too, the life of the record is prolonged many times. It is especially adapted for use on phonograph-radio combinations, and will appear in the 1942 models of a well-known maker.

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St. N. W., Washington, D. C., and ask for Gadget Bulletin 74.

A new liquid fuel is 60% coal and 40% oil, and produces a hotter fire than either coal or oil alone.

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