were originally made to be cranked by hand. Today our high-compression powerful motors cannot be cranked by hand, but, like the vermiform appendix in man, the archaic counterclockwise direction of rotation persists. With the resumption of automobile manufacture for civilian use, consideration should be given to making our new peacetime engines turn in the safer, clockwise direction. The cost is negligible, since the change is only a minor engineering one. The gain, while it may not bulk large in terms of the per cent change in the accident rate, is desirable to the individuals who may thereby be spared.

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The Etymology of "Fission"

Etymological matters should be left to experts; however, as this is not done in *Science*, I should like to add a comment at the risk of seeming pedantic. In regard to the English noun *fission*, from the Latin noun *fissio, fissionis*, a splitting, I think the verb should also be *fission*. Cf. *caution*, which is both noun and verb, from *cautio, cautionis*; and *petition*, both noun and verb, from *petito, petitionis*.

Then we get the accepted adjective *fissile* (pronounced without an aspirate and dated 1661 by the Oxford Dictionary) and the new and proper adjective *fissionable*. The two are doublets, but, if *fissile* has acquired a special connotation, as J. D. Buddhue suggests (*Science*, 1946, 104, 301), then *fissionable* is left for more general use.

The language already has *fissive* in it, meaning pertaining to fission, and many words formed on the *fissi-* stem: *fissiparous, fissiped*. Perhaps we are now ready for some more of these words.

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Pleistocene Fossils in Eocene Rock From New Jersey

For the past few years the writer has been collecting pieces of greenish and brownish stone washed up on the Atlantic beach between Belmar and Long Branch, New Jersey. Many of these pieces of rock are highly glauconitic and bear a close resemblance to the "greensand" of the Shark River and Manasquan formations of Eocene age which outcrop a few miles inland from the coast. That this rock is of Eocene age is confirmed by the presence of the typical Shark River fossil (*Venericardia perantiqua* Conrad) and the fish jaw (*Nodidanion howelli* Reed), the latter recently described from one of these stones (*Acad. nat. Sci. Phila. Not. Nat. 172*, 1946). Some of the brown stone contained typical Vincentown (Eocene) Bryozoa.

It seems logical to suppose that these Eocene formations, especially the Shark River and the Manasquan, continue eastward from land outcrops and are exposed on the sea bottom off the New Jersey coast.

It was further observed that these pieces of rock had been bored by pelecypods. At first it was thought that these were also of Eocene age, but upon identification they proved to be *Pholas truncata* Say, *Zirphaea crispata* Linné, and *Petricola pholadiformis* Lamarck—all characteristic species of the Pleistocene and Recent and not known from the Eocene. Some of the shells are imbedded firmly in the rock, while others are in unconsolidated sand within the harder rock.

Probably the Eocene rock was exposed on the sea bottom during Pleistocene or Recent times. During that time it was bored by these pelecypods, the holes then becoming filled with unconsolidated sand, partly derived from the disintegrated Eocene greensand rock. In this sand were contemporary (Pleistocene or Recent) shells. The lime from these shells gradually acted as a cementing agent, causing the holes to become completely filled, so that it is frequently impossible to recognize the outline of the original hole, although many transitional stages have been noted.

Among the Pleistocene (or Recent) species found in the fillings of these borings are *Nucula proxima* Say, *Nassarius trivittatus* Say, and *Mactra soladissima* Dillwyn. Petrified wood, thoroughly riddled by *Teredo*, was also noted.

This seeming mixture of faunas of two ages in a single deposit is not uncommon and frequently causes headaches to stratigraphers. The present mixture would, however, appear to be easily explained in the manner indicated above.

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"Container-Dent Sensitivity" of Explosives

When explosions result from rough handling of bomb-type ammunition, they generally must be ascribed to accidental fuse action because, with fuses generally present, alternative explanations appear less reasonable. But during the war there have been some explosions of items of bomb-type ammunition where (with partial detonations) fuses were recovered intact, and other cases where bomb-type ammunition items were exploded without any fuses in them. The impacts which resulted in these explosions were caused by relatively light bumping or by the items falling from heights ranging from 4 inches up to 4 or 5 feet; and they were too slight to have caused rupture or more than mere dents.

This phenomenon, now called "container-dent sensitivity" differs essentially from "bullet sensitivity" or from "fragment sensitivity," which produce detonations of explosives in thin metal containers when the latter are penetrated by bullets or fragments at high velocities on the order of 2,000 feet per second or more but are only ignited, or are unaffected, at much lower, though still "penetrative," velocities.

Also, this phenomenon is by no means the same as that involved where an even greater height of fall of a small weight is used to explode a few milligrams of *bare* explosives in conventional "impact sensitivity" tests. Its existence seems, in fact, not implied by results of usual explosive sensitivity tests, and it appears to have had little or no important mention in the literature of explosives.

Dents on U. S. bomb-type ammunition caused by impacts at least as severe as impacts causing these occa-