

young thrive best on certain kinds of caterpillars. It may even be necessary to import suitable species of moths and butterflies into a thoroughly-sprayed, caterpillarless land, and keep them in special bird-and-insect preserves.

Just as presidential proclamations now establish new national parks and federal game sanctuaries, the New Deal of 2000 A. D. may be expected to act for the preservation of insects.

"In the year 2000, the President of the United States issues a significant proclamation. In order to provide suitable conditions for native and introduced pollinating insects, the Government claims areas of land at few-mile intervals in rural districts throughout the country. These areas will be maintained as Insect Gardens, under the direction of government entomologists.

#### Caterpillar Plants

"Milkweed will be grown for larvae of monarch butterflies, plants of the parsley family for black swallowtails, and so on. Woodbine, purslane, and other suitable food will be grown for the larvae of the more important sphinx moths.

"No caterpillars are to be killed in these gardens. If one district becomes overpopulated, the surplus material will be taken to another district where these same insects are not abundant enough.

"Especial attention will be given to introducing solitary wild bees into localities from which they have disappeared. European species, if available, will be purchased to increase the supply. Colonies of native bumblebees will be placed in favorable habitats. European species, if available, will be purchased to increase the supply. The emphasis on solitary bees and bumblebees will be necessary because of frequent epidemics of hive-bee diseases that reduce their usefulness when they are most needed."

#### Insects for Posterity

It may seem fantastic to think of a world careful of its insects, and taking such means to coddle them. But remember, we utterly exterminated the passenger pigeon, and saved bison and pronghorn just in the nick of time. So while you go on massacring the bad insects, better try to be a little kinder to the good ones. Your grandchildren may want them.

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MEDICINE

# Medical Association Offers To Hold Medical Patents

## Reversal of Policy Made Necessary to Prevent Unscrupulous Commercial Exploitation, Editor Says

**U**PSETTING 23 years of policy, the American Medical Association has admitted indirectly that patents on medical discoveries are needed.

Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*, speaking before the American Chemical Society meeting at Rochester, N. Y., advocated the setting up of a non-profit holding corporation to administer patents in the medical and health fields.

The new suggestion of the powerful and conservative A.M.A. includes suitable royalties to the discoverers. This is a distinct change from the 1914 resolution of the A.M.A. which permitted it to accept patents. Under this resolution neither the A.M.A. nor the patentees would receive remuneration for the patents.

In effect, the physicians now recognize that the profit motive in the development of research discoveries has an important function in present day American society.

Under its 1914 resolution, said Dr. Fishbein, the American Medical Association never accepted any medical patents and it did not formulate any plan for the administration and control of patents in the medical field.

The new proposal advanced by the A.M.A. spokesman is a modern compromise with the rigid principles of medical ethics which state distinctly "it is unprofessional to receive remuneration from patents for surgical instruments or medicines."

The new suggestion for the control of medical patents, declared Dr. Fishbein, seems needed because of the diversified methods which university and non-profit research foundation laboratories have been compelled to take in order to protect their discoveries from unscrupulous commercial exploitation.

Dr. Fishbein cited the discovery, patenting and control of insulin, used in treating diabetes, as an example of desirable control of medical discovery. The arguments in the patent field over the production of vitamin D and vitamin D products are illustrative of the troubles

that may arise, added Dr. Fishbein in contrast. He continued:

"The sun in the sky should be freely available to all who wish to use it. Yet it has been hinted that there are some concerned with patents on vitamin D who would even inhibit investigators from experimenting with the sun."

*Science News Letter, September 18, 1937*

### From Page 179

per cent. Bombing planes that now could carry 2,000 pounds of bombs will be enabled to carry 3,000 pounds of their deadly missiles with the new 100 octane number fuels.

To the meeting of the American Chemical Society, Dr. Gustav Egloff of the Universal Oil Products Company reported the potentialities of these new fuels which the chemist is developing.

If the engines of the great China Clipper were designed to use these newest fuels the increased payload possible would be worth \$2,000 on each single trip between Alameda and Honolulu, said Dr. Egloff.

Iso-octane is a synthetic fuel that is improved in its burning characteristics over any thing which nature produces. Normal octane, said Dr. Egloff, burns too rapidly in a motor of a modern automobile or airplane, because its eight carbon atoms are strung out in line. During combustion in the cylinder of a motor the flame rushes rapidly down this straight line of atoms and produces the engine knock known so well to motorists.

What the chemists have done with the new iso-octane fuels is to introduce a chemical "maze" through which the flame spreads more slowly, as though bewildered. The maze in reality consists of carbon atoms branching off from the main chain. The slower burning yields less engine knock at higher compression in the cylinders of a motor. And higher compression means more power per gallon of fuel. While this added power is valuable for automobiles it is most vital