

TOWEY'S DISEASE

By Tom M. Johnson, M.D.

One of the strangest and most unexpected contributions made by the Model "A" was the description of a new disease in the medical literature called "Towey's Disease"¹, a classic prototype for many different diseases of the same nature to be later recognized. It all began during the summer of 1931 when ten employees of a railroad tie plant presented themselves to John W. Towey, M.D., Director of Pine Crest Sanitorium in Powers, Michigan. All ten complained of asthmatic-like symptoms which had occurred spontaneously, with no previous history of this type of problem. Dr. Towey, an inquisitive physician who was well-founded in the recent advances in chest diseases, joined forces with Willis H. Huron, M.D., Medical Director of ??? Hospital in Iron Mountain, and together the two men studied and subsequently described a new disease.

No further cases of Towey's Disease were reported among that particular tie plant's employees, because soon the plant was forced to cease operations due to poor economic conditions. At the same time, however, similar asthmatic symptoms began to appear among thirty-six employees of another sawmill in the same locality providing wood for automobile bodies. Investigation revealed that 75 percent of the logs being cut by these workers were maple, and that this particular wood was being used in the bodies of Model "A" Station Wagons.

Before Dr. Towey died in November of 1970, I had the opportunity to meet with him on several occasions and to substantiate this chain of events. He was quite excited to receive a piece of maple from the body of my Model "A" Station Wagon to use as a nameplate on his desk. He confirmed the fact that many of the men described in his original article were from the plant producing wood for the station wagon. As one of his hobbies, Henry Ford had established a number of sawmills in the Upper Peninsula², which supplied wood for various industries and outlets.

The depressed economic conditions of the Upper Peninsula during the early 30's in one important factor that allowed Towey's Disease to be described at all. Mills would shut down and there often would be a long interval between cutting a tree and its actual sawing. The disease is actually caused by spores of a fungus that proliferate under the bark of the maple tree. Freshly cut or green maple shows no signs of the fungus, but the spores develop under the bark if the tree is allowed to sit out for a year or two. Then, during cutting operations, great clouds of black dust from this spore darken the air. The men inhale the spores which trigger an allergic reaction, causing asthma and other respiratory symptoms, including an abnormal chest X-ray. However, actual infection does not take place. Therefore, this disease was an important example of a number of diseases that have been seen in some other industries and in other locations due to the inhalation of material causing allergic symptomatology. Drs. Towey and Huron were able to halt this symptomatology by spraying water on the saw, thereby eliminating the free-floating particles in the air. Following this simple maneuver in the sawing plant, no further cases were seen. This disease has only been described several times since, one of them in the same general area around Marxhfield, Wisconsin³. Dr. Dean Emanuel saw several workers in a maple-sawing industry with similar symptomatology and were cured again by simple avoidance of the problem and adequate ventilation.

The Model "A" has had a fascinating and important history in the life of many Americans. However, an aspect that has not been investigated and widely written about is its influence on the health of the population which it served. The "Colles' Fracture of the Model 'T' " became pass'e with the advent of the self-starter. Because of the production of the wooden station wagon, Towey's Disease was described and became an important contribution to the medical literature.

REFERENCES:

- 1 Towey, J. W., Sweany, H. C., and Huron, W. H., *Severe Bronchial Asthma Apparently Due to Fungus Spores Found in Maple Bark*, JAMA, 99, pp 453-59, 1932.
2. Personal communication with Mr. George Haviland of Ford Motor Company.
3. Emanuel, Dean A.; Lawton, Ben R.; and Wenzel, Frederick J., *Maple Bark Disease - Pneumonitis Due to Coniosporum Corticele*, New England Journal of Medicine, 266, pp 333-37, February 15, 1962.