

## News of the arts

### The guard is changing

Women will parade on Parliament Hill this year as part of the Changing of the Guard, for the first time since the ceremony began in Ottawa 21 years ago. The decision to permit women to join previously all-male ranks was made by Defence Minister Barney Danson in January. About ten women are expected to march in the military drill which attracts thousands of tourists at 10 a.m. daily during four summer months in the capital.

The ceremonial guard, a 288-member non-combat militia unit, follows the traditions of the Governor-General's Footguards and the Montreal-based Grenadier Guards. Major Wayne Brocklehurst, commander of the ceremonial guard, stated that preference was given to members of these units in recruiting for the summer job. The remaining positions are offered to members of other reserve military units, and finally to applicants from the public. Among the female recruits, three are at present serving in the militia. Although the height requirement of 1.7 metres has been decreased to 1.65 metres to accommodate female applicants, women will still have to pass a medical exam and undergo the same training tests as their male counterparts.



Changing the Guard on Parliament Hill.

### Immunization possibility against multiple sclerosis

Within the past year, reports of immunological treatment of cancer and meningitis have attracted public attention (see *Canada Weekly*, Vol. 6, Nos. 11 and 49). Most recently, a medical team in Montreal has applied inoculation in the fight against multiple sclerosis (MS), reports Janice Hamilton of Canadian Press.

Drs. J.B.R. Cosgrove of the Montreal Neurological Institute, Guy Lamoureux of the Frappier Institute and Pierre Duquette of Notre Dame Hospital are attempting to boost the immunity of his patients and halt the progress of the disease by injecting an experimental group with a complex protein, known as the "transfer factor", derived from the white blood cells of healthy individuals.

#### Type of test

To obtain a sufficient quantity of the serum, 60 donors were hooked up to a machine which collected white blood cells for four to six hours. Half of the 30 MS patients, who volunteered to participate in the experiment were inoculated with the serum, while the other half received a placebo treatment.

The researchers are observing both groups to compare the recurrence of MS attacks. They acknowledge, however, that their work is complicated by both individual differences in the progression of MS and by the irregularity of attacks in the same patient.

Multiple sclerosis, a degenerative disease of the nervous system, affects the myelin, or protective sheath covering nerve fibres thereby weakening the transmission of nerve impulses. Typical symptoms include tingling or numbness in the extremities, blurring of vision and eventual paralysis. The disease is prevalent among inhabitants, aged from 20 to 40, of northern climates.

#### Measles theory

Although the exact cause is unknown, the Montreal doctors attribute MS to a defect in the body's immune system which increases susceptibility to certain viral infections. According to Dr. Cosgrove, MS may be related to a measles virus: he notes that a significant proportion of MS patients have a higher than average count of measles antibodies. "It may be that the measles virus changes in the body as we

grow older and locates itself in the nervous system in a different form so we can't find it when we look for it," he suggests.

Although no conclusive results are cited in the report it is conceivable that the research efforts will lead eventually to the development of a vaccine to treat MS. The hope of Dr. Cosgrove and his colleagues, he states, was to "transfer something healthy into the patient and by changing his immunity, stop the progress of the disease".

### Regulations help toward protection of ozone layer

Minister of the Environment Len Marchand has announced last month new regulations under the Environmental Contaminants Act which would ban certain chlorofluorocarbons as spray-can propellants in hairsprays, deodorants and antiperspirants.

The ban, which is intended to come into effect on December 1, 1979, will, it is hoped, reduce the rate of depletion of the ozone layer of the earth's atmosphere.

"Our research," said the minister, "as well as that conducted in other countries, was aimed at predicting ozone depletion. The verdict is not unanimous among the world scientific community, but the consensus is that a 15 percent reduction in the ozone layer by the year 2000 can be expected, based on the 1973 chlorofluorocarbon release rate."

Earlier estimates had put the depletion at 10 per cent.

He said studies were under way to find ways of replacing non-aerosol uses of chlorofluorocarbons with environmentally acceptable alternatives.

Chlorofluorocarbons are suspected of posing a threat to the stratospheric ozone layer shielding the earth from the sun's ultra-violet radiation. Over-exposure to this radiation is associated with a variety of skin problems, including skin cancer. Adverse environmental effects are also suspected.

Canada produces only 2 per cent of total world emissions of chlorofluorocarbons into the atmosphere. A 50 percent reduction in aerosol spray consumption has already been accomplished in this country, as a result of action taken by Environment Canada in 1976, when discussions began with industry representatives.