

hicle equipped with a front-end blade, the machine removes a tree from its natural setting by forcing four hydraulically-powered triangular spades into the ground round the tree. The spades cut a cone of earth containing the root ball, thus minimizing damage to the root system.

The tree is sprayed with an anti-desiccant, a plastic film that prevents dehydration and which breaks down in sunlight, and is then transported to a pre-dug cone-shaped hole. It fits perfectly because the hole is dug either by the same spade that uproots the tree or by a special auger.

#### Ottawa world health reference centre

The World Health Organization has designated the Human Cytogenetics Laboratory of the Department of National Health and Welfare as an international reference centre for chromosome-aberration comparison and standardization of methods.

Cytogenetics is concerned with the cellular constituents, namely the chromosomes and genes involved in certain disease processes.

In making the announcement recently, National Health and Welfare Minister Marc Lalonde said that his Department was expected by the World Health Organization to co-ordinate and provide a reference centre for the Americas and westward to countries of the Pacific rim, including Australasia.

Two other international reference centres, in Edinburgh and Moscow, were simultaneously nominated by WHO to do similar work.

The functions of the Ottawa centre will be to improve and unify chromosome-aberration scoring methodology; to organize population-screening projects; to collect and disseminate information in these areas; and to train cytologists.

The WHO expects that the reference centres in Ottawa, Edinburgh and Moscow will concern themselves with population-screening for environmental effects and mutations (genetic changes produced by physical or chemical agents). The international body is concerned specially with the relation between mutating agents and all undesirable long-term affections caused by disease such as cancer.

#### Stratford's mobile meccano set

Stratford's acting company must feel very much at home on the set devised for the 1973 spring tour in Europe.

Although the familiar "thrust" stage of the Festival Theatre is not travelling with them they have the next best thing — a set that comprises all the elements of the open stage and can, at the same time, be adapted to the proscenium arch.

Described by technical director Robert Scales as the most sophisticated set ever built for a Stratford tour, the structure is made of steel — all "platforms and space", as he describes it. A balcony (ten feet above floor level), stairways and side pillars help create the open stage effect and, incidentally, provide the flexibility of seven acting levels for the players. One major change from the Festival Theatre is a raked, or angled, stage. The distinctive central pillar under the balcony is also missing, both necessary alterations in adapting to a proscenium-arch situation.

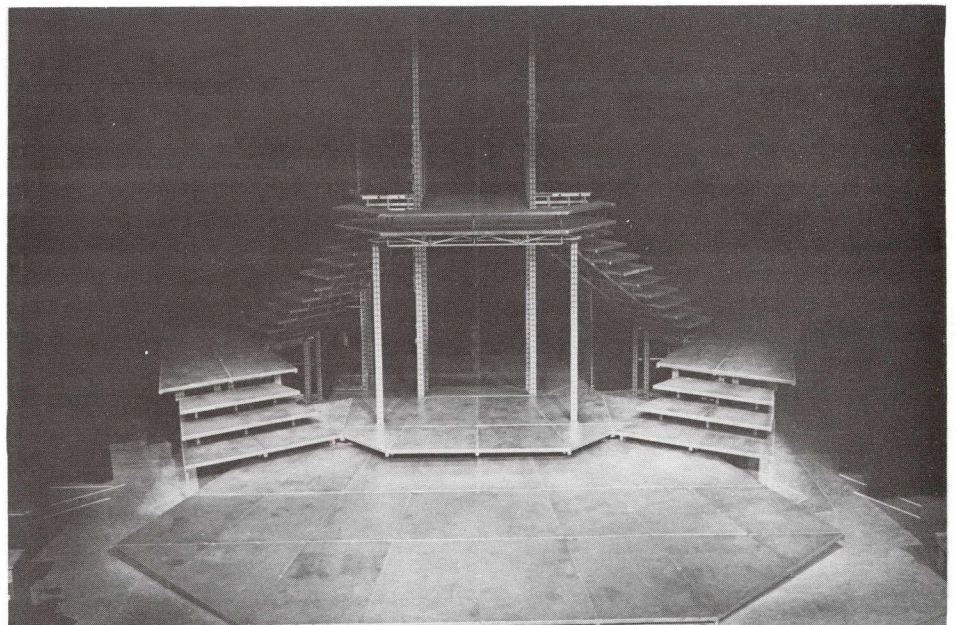
#### Dagwood sandwich

The original design, conceived by John Jensen (resident set designer of the Guthrie Theatre in Minneapolis), called for a structure of unrelieved steel but it was felt that the noise of actors moving around on the metal

floor might prove more than a little distracting for audiences. The problem was solved with a four-layered floor, built up something in the manner of the "Dagwood" sandwich: an underlying steel frame, topped by a wood covering and felt spacer and covered with a veneer of perforated metal. Side panels, hangings, etc. are also of perforated metal, creating a chain mail effect, and are designed to be completely collapsible. In fact, the entire set is collapsible, no small advantage considering that it will have to be assembled and dismantled eight times in eight weeks.

In all, there are 200 pieces to the structure, but they can almost all be reduced to flat dimensions, the longest of which is 20 feet. The only piece that doesn't collapse is the stairway. A unique feature — and one that brings a smile of relief to the technical director's face — is the lack of nuts and bolts. "It's something like a giant Meccano set," he explains, "the whole thing can be put together with a hammer."

Stratford's European tour began in Copenhagen on January 24 and includes Utrecht (January 30-31); The Hague (February 3); Warsaw (February 7-10); Cracow (February 13-14); Moscow (February 20-25); and Lenin-grad (March 1-5), where the tour ends. The Company is performing two works by Shakespeare — *King Lear* and *The Taming of the Shrew*.



The "meccano set" stage, on tour with the Stratford acting company, can be assembled with a hammer.