Ergonomic Wheelchair for Paraplegic Dogs With Resting Mechanism

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After the development of specific wheelchairs for dogs, the life quality of these animals with locomotor disabilities has improved considerably. However, even with the many benefits provided to dogs, canine wheelchairs can present some inconvenience to the animals that use them. An example of this are conventional wheelchairs, which do not have a resting mechanism, causing the animal to spend a long time without resting, which is considered by veterinarians to be very harmful to the disabled animal health. In view of the problem described, this project consists of the development and manufactoring of a wheelchair prototype with a resting mechanism, to the animal can rest without being removed from the chair, aiming at greater comfort to the animal and practicality to the owner. In addition, the report presents the choice of ideal materials to be used in wheelchairs for dogs, in order to provide better ergonomics and experience for the animal during the use of the product. Finally, the use of rapid prototyping in the production of some parts made in 3D printers is also reported in the report, in addition to presenting the assembly processes of the wheelchair prototype.

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