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TOPIC: IF I COULD INVENT SOMETHING NEW.

If I could invent something new, I would love to create a power pedal washing machine that is cheap enough for everyone including the needy to have access to so that they would live a comfortable life even as they do their laundry.

Based on my research, there are some practical steps to creating the power pedal washing machine. The design involves using a bicycle pedal and sprocket system to power the washing drum. The pedal motion is transferred via a chain to turn the drum and agitate the clothes.The main components include a seat, pedal and sprocket assembly, chain, and the washing drum. The drum is typically made from a repurposed metal or plastic container.

Nevertheless, to assemble, the pedal and sprocket are mounted on a frame, with the chain connecting to the washing drum shaft. The drum is suspended inside an outer casing. A small amount of water (around 5 liters) is used for each wash and rinse cycle.The wash cycle takes 3-5 minutes of pedaling, depending on the load. The pedaling action spins the drum to agitate the clothes. A spin cycle can then be used to extract water before line drying. These pedal-powered washers are inexpensive to make, costing around $50-$60 in parts, and are a practical off-grid or low-cost laundry solution. They also provide exercise while doing chores.

Also, the most suitable materials for building a pedal-powered washing machine are: Galvanized steel for the frame, drum, and other structural components. Galvanized steel is corrosion-resistant and durable enough to withstand the weight and forces involved. Plastic or rubber for the seat, which needs to be comfortable for the user. A bicycle sprocket and pedal assembly can be repurposed to provide the rotary motion. A bicycle chain is used to transfer power from the pedals to the washing drum shaft.The washing drum itself can be fabricated from a repurposed metal or plastic container.Other materials like stainless steel or carbon steel can also be used, but galvanized steel is a good balance of cost, corrosion resistance, and strength for this application. The key is selecting materials that can withstand exposure to water and detergent over many wash cycles. Repurposing bicycle parts helps keep costs low while providing a proven pedal power transmission system.

Moreover, some of the advantages of using recycled materials in pedal-powered washing machine include: how cost-effective it is,its sustainability, accessibility, the simplicity of its design, portability due to its lightweight

Overall, the use of recycled and repurposed materials is crucial in making pedal-powered washing machines an affordable, sustainable, and practical laundry solution, especially in off-grid or low-resource community.

In coclusion, the affordability of this machine would help the needy mostly not to spend hours washing a pile of clothes when minutes can be spent on using a simple machine.