**IF I HAD A CHANCE TO INVENT SOMETHING NEW**

If I had a chance to invent something new which would be very beneficial for mankind it would be a WATER FILTRATION AND PURIFICATION MACHINE. Water contamination is a problem of todays world that needs an immediate solution.

There is no life without water apparently a simple truth but one that people seem to overlook. Poor management and irrational use forces communities to migrate in search of drinking water. Industries are polluting underground water and this issue is growing massively. Providing safe and clean drinking water to all people is essential for public health and well-being especially in regions where water scarcity is a pressing issue. Due to pollution, poverty and inadequate resource management, around 2.1 billion people lack access to safe drinking water. Agriculture is responsible for seventy percent 70% of global water loss. Annually, 297,000 children under the age of five die from diarrheal infections caused by poor sanitation, hygiene or contaminated drinking water. 80% of waste water is discharged into the environment without being processed or reused.

Here is how it works. Firstly, water is pumped from the water source into the turbine which channels the water to the filtration layer. The filtration layer is made of natural resources which include gravel, fine sand, activated charcoal and sharp sand.

The water will first pass through the gravel which removes the big particles in the dirty water. Such particles include plastic containers, food remains, stones, you name it. The water now passes through the fine sand for further filtration. It filters out other smaller particles but the water still has bad odour. Here is where the activated charcoal comes in. The water now passes through the activated charcoal which removes the unwanted poison and the bad odour. This poisoned free water now passes through the fine sand for further filtration. The result of this filtration layer will result in clean water. You can now use this clean water for your daily use.

Creating this invention doesn`t only comes with using it but also managing it. You can maintain your purification system by changing the filter in a period of 2 months time, so that it would not get clogged. The size of these machine would be the size of a normal washing machine with a pipe like-tap for collecting clean water and columns for collecting debris.

The reasons for creating this machine include:

1. It saves money because we can stop spending money on bottled water because the machine makes the water clean.

2. Consuming contaminated water is next to inviting life threating diseases like cholera, diarrhea, dysentery and typhoid. However, drinking pure water adds a layer of safety.

3.Save time: In Nigeria and other parts of the world, children who live in areas with no access to water at all walk long distances to fetch water which is stressful.

I strongly belief that this invention will help in solving one of humanity`s biggest problems which is water contamination.

This essay was written by Ugege Wilson Faithful Ogheneruno.

Class: JSS3B.

School: Joyprime Model Secondary School, Uyo. Akwa Ibom State.