**EXISTING SYSTEMS**

Some automatic flushing systems do exist in the market, but they are too expensive due to their complex construction. They generally use some optical or electrical sensors to detect the presence of a person using the toilet and accordingly they operate. They are found to be used in airports, shopping malls, multiplex etc. But their use in the public toilets is not possible due to the excessive cost and frequent maintenance.

**DRAWBACKS OF EXISTING SYSTEMS**

• Continuous monitoring

• Battery maintenance

• Sensor requirement

• Costly

**INNOVATION**

So we have developed a mechanism to flush the toilets automatically by utilizing the human weight. The mechanism does not require any external power or human concern. Rather, it just works mechanically utilizing the weight of the person sitting on it.

**ADVANTAGES OF THE DEVELOPED MECHANISM**

• No sensors or electronics involved.

• No human effort required.

• Mechanism is robust

• Economical

**DESCRIPTION OF PARTS USED**

The various essential parts that make the system run are:

- • Cistern

• Platform or Base

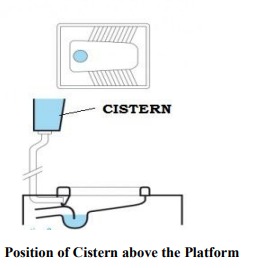
• Supporting Stand

• Coil Compression Sofa Spring

• Bolt and Nut

• Striking Lever with a Rubber at the End

**1 Cistern:** - The modern water closet or toilet utilizes a device to reserve and hold the correct amount of water required to flush the toilet bowl called cistern. Design Considerations: Modern toilets use 6 to 9 L per flush, whereas older models were designed for flush water quantities of up to 20 L. There are different low-volume flush toilets currently available that can be used with as little as 3 L of water per flush.

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**• Handle or button:** Its basically is a switch provided on the tank to flush when required.

**• Inlet valve**: The inlet valve controls the water supply coming into the tank. It lets water in when the tank is empty, and stops water coming in when the tank is full.

**• Float ball and float rod:** The float ball rises as the tank fills with water. As it rises, the float rod attached to it presses against the inlet valve. When the tank is full, the rod is pressing against the inlet valve hard enough to turn the water off. This stops the tank from overflowing.

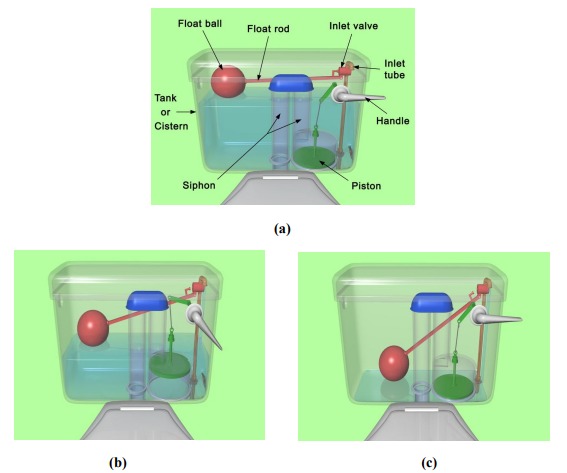
Finally the tank empties quite quickly, and the float ball floats to the bottom. That means the float rod is no longer pressing against the valve, so water begins to flow into the tank, filling it up again. The water which left the tank cleans the bowl and carries the waste with it to the septic tank.

**DIAGRAMATIC MODEL**

**(a) Parts of a Typically Cistern System**

**(b) A Toilet Cistern Emptying**

**(c) A Toilet Cistern Empty**

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