FABRICATION of LIFE SAVING MACHINE: A REVIEW

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Abstract:
Life saving machine can be guided to the depth of the bore well and controlled remotely. It consists of two main parts, the carrier vehicle and the rescue robot. The carrier vehicle takes the whole device into the depth of the bore well, when the position of the child is detected by camera, infrared LED and sensors; the rescue robot does the rest of work; grasp the child and escape safely from the bore well. An experiment shows that the rescue operation takes only 1/5 of the total time taken by conventional procedure. The condition inside the bore well is always unknown. This machine is attached with all possible equipment required to observe the condition inside the bore well. Though bore well child saver machine is in its infancy but with further study and more safety considerations would not only became the most effective bore well rescue medium but also provide solution to many other problems regarding operational difficulties due to the compactness of the work space and time binding.

I. INTRODUCTION

The main problem afflicting human society today is the scarcity of water, which leads to the loss of a large number of wells. These perforated wells in turn have started to lead many innocent lives. The perforations that produced the water and were subsequently exhausted are left uncovered. A bright colored cap suitable to cover the mouth of the hole will prevent such accidents. Young children, without noticing the hole, digging for the hole, slipping and becoming trapped. The human search for water has finally ended in disaster, since the holes are dug too deep, it is completely impossible to save lives. Tire strength and medical equipment have difficulty rescuing children due to unknown levels of humidity, temperature and oxygen in the depths of the well. Rescue work can be a long dravismo problem that lasts about thirty hours. Time spent is enough to kill a precious life. Even if saved, the child may die from injuries. This created an open challenge for the field of engineering and medicine. salvation and the whole of human society.

We try to get this group of rescue mining companies in Canada and the United States. UU. Unfortunately, there are only methods available for application in open mines and mining wells, and no company or agency has methods for reaching narrow hole wells.

II. LITERATURE REVIEW

Palaniswamy, Assistant Professor, Department of Sridhar Electronic and Communications Engineering, Faculty of Engineering, Karagam University, Echanari post, Coimbatore, Tamil Nadu-India 641021 have presented the document “Life saving Machine” at the First International Conference on Interdisciplinary Research and Development, May 31 to June 1, 2011, Thailand. Five child deaths have been reported in the country since September 2001. Therefore, we only have nineteen with the newspaper test shown below. Their deaths are caused by dry wells discovered. When the casing tubes cost only Rs.2000-3000 / - they are removed, even a six-inch diameter widens and catches an unsuspecting child.
III. Life Saving Machine

To overcome these problems of these rescue operations, we have an alternative (feasible) proposal. We are developing a robot-type machine capable of extracting the trapped body in a systematic way. It will also do several operations that save lives for those who suffer, such as supplying oxygen. A video camera to closely observe the actual situation and continuous interaction with the patient can also be connected with a microphone and a speaker, which can trap the human being to communicate easily with that pit's exterior.

It will be a light car that will descend into the well tube and will systematically maintain the trapped body. This machine assembly will be supported by a group of tires and pulleys, a support and all the necessary accessories. In this alternative scenario, it will not be necessary to dig any holes parallel to the well. The remote controlled robot lowers well through the hole and performs the action. Many other discomforts will be avoided with this alternative technique. This robot type machine can save the body trapped by the well in a minimum and safe time.

IV. CONSTRUCTION DETAILS & SPECIFICATIONS

- Central frame.
- Translational element.
- Compression spring.
- Electric rotary actuator.
- Pneumatic linear actuator.
- Centrifugal compressor.
- Rubber wheel.
- Battery.
- Pipe with Stand.
- Pneumatic Pipe.
- Air Reservoir.

It consists of a main axis located in the center and the surrounding translation elements (link) articulated to the main axis, which together form the base frame of the vehicle. These links build three arms in which there are six wheels. A small consideration will show that the main axis and translation elements are so close that they generate a four-bar mechanism. A compression spring is installed at the rear end of the main shaft, whose inner diameter is slightly larger than the outer diameter of the shaft, so that the spring can freely deflect.
around the shaft. The sole purpose of the four-bar mechanism is to translate the spring compression force on the wheels. This compression force allows the vehicle to remain inside a vertical tube. Whenever there is a variation in the inside diameter of the tube, the arms must adjust (compress or expand) the radial space to reach the tube diameter. It is only possible because of this compression spring.

V. CONCLUSION

Human life is precious. The boredom of the child's welfare is a significant attempt to save the victim's life from fatal accidents. In addition to this, the unique ability to scale through vertical and sloped pipes broadens the scope of application in manufacturing industries and other relevant fields.

Following are some important points observed during the design and manufacture of the machine.

- In the current design of the drilling well, the life-saving machine has been manufactured to adapt to all possible situations that may occur in rescue operations.
- The structure is strong enough to withstand all possible loads, although it is made flexible at the same time to adjust the wide range of hole diameter and any variation in the hole diameter.
- In this rescue operation, time is a vital factor that alone can determine the successor's failure throughout the operation. Therefore, it was designed taking into account all the obstacles that may arise during the operation.
- The control of the vehicle and rescue robot is highly sensitive, which allows you to reach a great depth as soon as possible and to manipulate the child without hurting him.

VI. ADVANTAGES

- It is less expensive as compared to other rescue operation.
- Easy to operate by using Electric controller.
- More chances to save the child
- Easy in construction
- Less economical
- Easy to clean and maintain
- It is also work in renewable energy powered.
- Easy to handle

VII. FUTURE SCOPE

- As bore well child saver.
- As Pipe cleaning machine.
- As pipe inspection machine.
- In manufacturing industries and In space programs.
- In radio active or highly hazardous environment.
- In under water operation

VIII. ACKNOWLEDGMENT

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Fig. Fabrication of Life Saving Machine
IX. REFERENCES