# AUTOMATIC SCISSOR

[1]K. RAVI KIRAN, [2]B.ARCHANA, [3]K.SATHISH, [4]R.GOPI KRISHNA, [5]B.KARTHIK REDDY

[1]Assistant Professor, ECE Department,CMR College of Engineering & Technology

[2]Assistant.Professor, CSE Department,CMR College of Engineering & Technology

[3]Assistant Professor, MECH Department,CMR College of Engineering & Technology

[4-5]B-TECH, Dept.of MECH, CMR COLLEGE OF ENGINEERING & TECHNOLOGY

## Abstract

A new automatic scissor is designated, with a motor based. By using this type of scissor, we may reduce manual power, time reduction and easily opera able. It is efficient and effective fortunately it is less cost and easy to operate by manually. So, to overcome the man power cutting, One of the mechanisms is motor based process, in which reverse mechanism of engine can be done. Scissor plays an essential role in our routine life. They have been parted as many application in our day to day life. Scissor are used to cut material such as clothes, papers sheets, leathers etc. They are the equipment's which have vast applications and these can be able to operate easily. Scissor is equipped with sharp edges along with the safer handle. They are made up of stainless steel and proper hold able handle.

## 1. INTRODUCTION

The purpose of scissor is to cut thin material into different shapes and make clean cuts. Generally, the device has a bolt which keeps the blades and handle together, since han-dle for gripping and blades for cutting. Here, we have implemented the new techniques; they are either two methods to proceed the operation of the scissor. One of the mecha-nisms is motor based process, in which reverse mechanism of engine can be done. Oth-erwise, the another solenoid setup activates by supplying the current, the solenoid gen-erates the copper coil to produce magnetic field which can absorb by iron piece so recip-rocating motion is obtained. It can easily be operated. They has been used for its simple opera table, easy to handle and for quick work. It has more advantage includes it may easier and convenient property to use As use it has possible, we would sufficient to use, it has a little disadvantage of more time consumption and usage of manual power high. Hence, we need to maintain our time sufficiently. We introduce a new technique of auto-matic operated scissor. By using the technique, the scissor have been provided with so-lenoid setup, hence we can do work so quickly and it is very efficient, effective to cut all the materials quickly. This enables us to operate easily,

comparatively it takes less time and power consumption

## 2. RELATED WORK

Gizmobaba gadget and throw away your regular scissors. The battery op-erated automatic scissors gadget can be used to cut Paper, Cardboard, Cloth and just about anything that you cut with regular scissors. Use it in the kitchen, or to open those packaging material of new products. Chil-dren can use it for their school projects! It works using 4 x AA batteries (not included). Just insert batteries, turn the power on and you are ready to go! You can also use a 5V power adapter (not included). Designed for home use only. Laser cutting is a technology that uses a laser to vaporize materials, re-sulting in a cut edge. While typically used for industrial manufacturing applications, it is now used by schools, small businesses, architecture, and hobbyists. Laser cutting works by directing the output of a high-power laser most commonly through optics. The laser optics and CNC (computer numerical control) are used to direct the material or the laser beam generated.

## 3. IMPLEMENTATION

The previous problem of the scissors is that they can't be easily cutted. Because there is no special scissors are available in the market. The cutting is done by human efforts. It can be reduced in our design. It will minimize the human effort at low cost. The design of the scissor provided by placing the rod in between the scissor holes with respect to our requirements. The steel rod distance mainly depends on the size of scissor. A cap is adjusted in between the scissor hole and the rod is placed and the rod is placed on the cap with the help of nuts and bolts. For the movement of the cap a motor is fixed to move up and down. The motor is connected with battery. Nowadays scissor plays a major role . The disadvantage is that , to cut material such as clothes, papers sheets, leathers etc its has taking more time . • So in order to over come this problem a automatic scissor is designed which will be useful to cut the materials without any damage . • Also it will be easy to operate and maintenance will be easy and affordable to all groups of people .

1. The device must be easily used by everyone.

2. The cost should be economical. .

3. If any problem arises it should be easily repaired.

4. Easily portable.

The following image shows the circuit diagram of the device, It includes simple components like solar panel, battery and motor
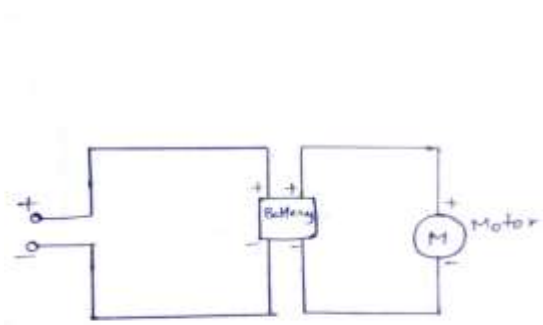
## 4.  EXPERIMENTAL RESULTS

Our idea is presented to reduce the problem of man power , time and to make the work easy also to encourage all groups of people and stand out uniquely with their thought.Our design includes very simple mechanism. The design of the prototype is as shown below in the figure
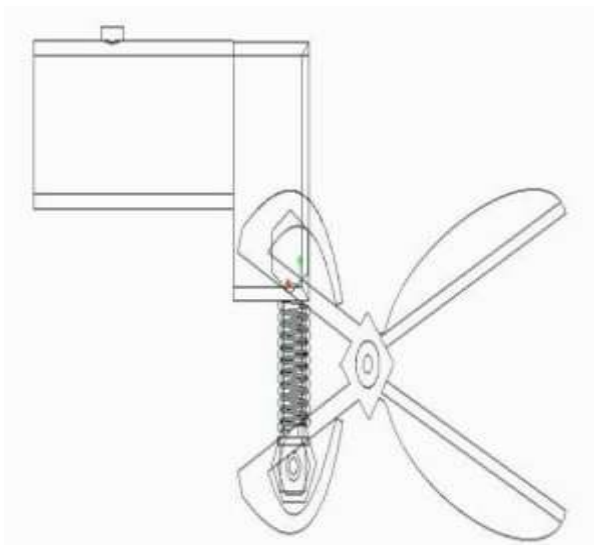


Making a device by rechargeable battery which is used to cut paper and cloth by using very basic components like motor ,battery, scissor etc.



Now the scissor is fixed on height from the base , the wiring is done accordingly so that the power reaches the battery aswell as the motor and then the motor draws the power from the battery directly and if needed we can use while recharging also

## 5.  CONCLUSION

The purpose of scissor is to cut thin material into different shapes and make clean cuts. Generally, the device has a bolt which keeps the blades and handle together, since handle for gripping and blades for cutting. Here, we have implemented the new techniques The **AUTOMATIC SCISSOR ,** can be used for the purposes of cutting cloths , papers to reduce the work.  Scissors are generally used to cut the material . But they may take longer duration of time to work . By implementing the electric scissor , we can promote the quick work , better cutting , less time , reduce manual work , and good usage .

## 6. REFERENCE

https://nevonprojects.com/manually-operated-eco-friendly-road-and-floor-dust-cleaning-machine/

https://youtu.be/6xptpf89MGU

https://youtu.be/ytw1I8wf4Eg

https://www.instructables.com/Table-Top-Scissors-The-cutting-edge-of-technolog/

1. Nayak, S.C., Kumar, K.V., Satyanarayana, B., "Towards designing a computationally efficient neural network model for improved financial time series forecasting", Lecture Notes in Electrical Engineering, 2020, Vol. 643-Issue, PP-605-619.
2. Musini, V., Merugu, S., Rohini Reddy, T., "Information system used to study on effect of groundwater quality", Lecture Notes in Electrical Engineering, 2020, Vol. 643-Issue, PP-531-542.
3. Shukla, A., Merugu, S., Jain, K., "A technical review on image super-resolution techniques", Lecture Notes in Electrical Engineering, 2020, Vol. 643-Issue, PP- 543-565.
4. Praveen Kumar, K., Amulya, B., Venkateshwar Rao, B., "Compact multiband printed antenna design and analysis", International Journal of Control and Automation, 2020, Vol. 13-Issue 3, PP-58-63.
5. Rao, P.V.N., Bala Subramanyam, P.V., Muthu Balaji, S., "Improving the efficiency of the electrical vehicle wireless charging system by rectifier load analysis using ANFIS controller", Journal of Advanced Research in Dynamical and Control Systems, 2020, Vol. 12-Issue 3, PP-1370-1379.
6. Reddy, P.C.S., Sureshbabu, A., "An Applied Time Series Forecasting Model for Yield Prediction of Agricultural Crop", Advances in Intelligent Systems and Computing, 2020, Vol. 1118-Issue, PP-177-187.
7. Kotishwar, A., "Impact of high frequency trading on equity market with reference to NSE India", Indian Journal of Finance, 2020, Vol. 14-Issue 1, PP-58-76.
8. Sreekanth, B., Srinivasa Varma, B., Saha, B.P., "Reliability of zirconia toughened alumina (Zta) ceramics cutting tools while machining hardened steels of 340 bhn in high speed machining", International Journal of Mechanical and Production Engineering Research and Development, 2020, Vol. 10-Issue 1, PP- 209-222.
9. Nayak, S.C., Kumar, K.V., Jilla, K., "ACRRFLN: Artificial Chemical Reaction of Recurrent Functional Link Networks for Improved Stock Market Prediction", Advances in Intelligent Systems and Computing, 2020, Vol. 990-Issue, PP-311-325.
10. Nayak, S.C., Sanjeev Kumar Dash, C., Behera, A.K., Dehuri, S., "Improving Stock Market Prediction Through Linear Combiners of Predictive Models", Advances in Intelligent Systems and Computing, 2020, Vol. 990-Issue, PP-415-426.
11. Sahu, K.K., Nayak, S.C., Behera, H.S., "Towards Designing and Performance Analysis of Evolving Higher Order Neural Networks for Modeling and Forecasting Exchange Rate Time Series Data", Lecture Notes in Electrical Engineering, 2020, Vol. 605-Issue, PP-258-268.