

## **Instructions for Making a Magic Wallet**

By Alexey V. Ivchenko

Put a paper bill or a picture in the crossed ribbons compartment, close the wallet, and open it from the other side. You will now see your picture in the compartment with the parallel ribbons. This trick has been around for centuries, and we will show you how to make it at home.



## You will need:

- 1. Four identical rectangles made of cardboard or some other firm material. These should be just a little larger than the paper currency of the country in which you live.
- 2. Ribbons these will be used to construct our reversible hinge joint.
- 3. Liquid paper glue

The front and back views of the finished mechanism of the wallet are shown in Fig. 1.

First, glue the ends of the ribbons to the backs of the two pieces of cardboard as shown in **Fig. 1(b).** 



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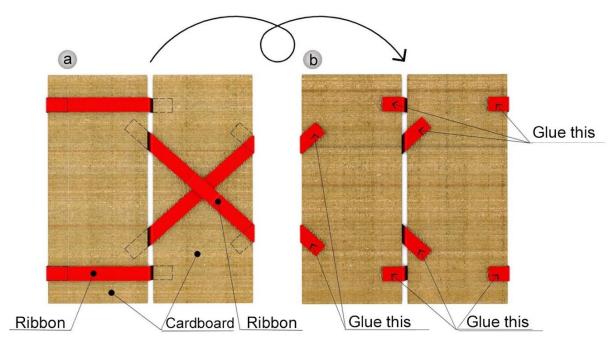


Figure 1

Next, give your wallet a finished look by gluing the remaining two pieces of cardboard to the sides where the ends of the ribbons are visible, as shown in **Fig. 2**.

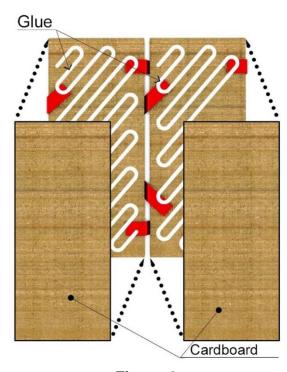


Figure 2

That's it! Let the glue dry and show your magic wallet off to your friends!

If you want to know how the ideas discussed here were used to design a cutting edge airplane wing, read the <u>full text by Alexey Ivchenko</u>.