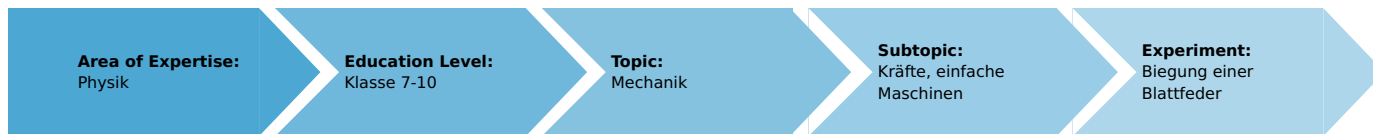


Bending a leaf spring (Item No.: P1252000)

Curricular Relevance



Difficulty



Easy

Preparation Time



10 Minutes

Execution Time



10 Minutes

Recommended Group Size



1 Student

Additional Requirements:

Experiment Variations:

Keywords:

Principle and equipment

Principle

Investigate the bending behaviour of a leaf spring under the conditions that the point of application and the direction of the force remain the same.

In addition, demonstrate that the action of the force is greatest when the force acts perpendicularly to the leaf spring.

Equipment

Position No.	Material	Order No.	Quantity
1	Demo Physics board with stand	02150-00	1
2	Clamp on fixing magnet	02151-01	1
3	Torsion dynamometer	03069-03	1
4	Scale for demonstration board	02153-00	1
5	Pointers f. Demonst.Board, 4 pcs	02154-01	1
6	Optical disk, magnet held	08270-09	1
7	Leaf spring	02228-00	1
8	Marker, black	46402-01	1

Set-up and procedure

Set-up

- Place the clamp on fixing magnet onto the demonstration board and clamp the leaf spring into a horizontal position with it.
- Position the two pointers in such a manner that their lateral edges are at the same height as the horizontally positioned leaf spring (Fig. 1).
- Place and adjust the dynamometer in such a manner that its traction cord is vertical.

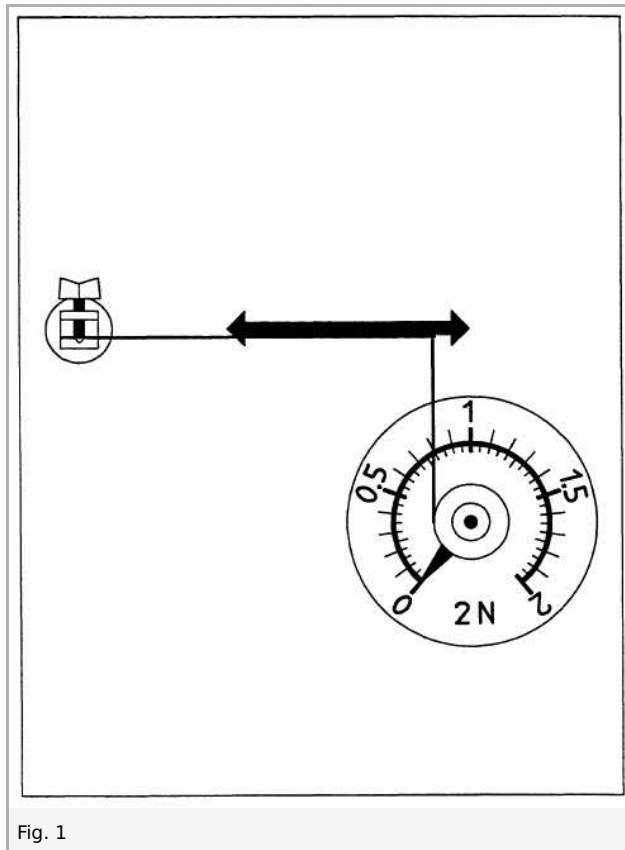


Fig. 1

Procedure

Observations and evaluation

Observation

Evaluation