means, over a distance which is such that the end of the second pressure-exerting member is placed on one side or the other of the second wedge-shaped member, depending on the first or the second position, after which the second pressure-exerting member is displaced further in the longitudinal direction, so that the end of the pressure-exerting member, depending on the location with respect to the wedge, is able or is unable to displace a touch pin which is not the touch pin displaced by the first pressure-exerting member and can retain this other touch pin in a desired position, allows such a device according to the invention to be made even more inexpensive. The compact design means that it is possible in a simple manner to construct a braille reading board comprising a plurality of lines.

The invention will be explained in more detail with reference to the drawing, in which:

FIG. **1** shows a diagrammatic illustration, in side view, of two braille cells according to the invention;

FIG. **2** shows a longitudinal view of a braille cell in accordance with FIG. **1**;

FIG. **3** shows a perspective view of a braille cell in accordance with FIGS. **1** and **2**;

FIGS. **4**A–D show successive steps in making a braille symbol readable in a braille cell in accordance with FIG. **1**;

FIG. **5** shows a diagrammatic side view of another possible braille cell according to the invention;

FIG. **6** shows a longitudinal view of a braille cell in accordance with FIG. **5**.

FIG. **1** diagrammatically shows two braille cells **1**. Each braille cell **1** comprises a frame **2** with a touch board **3**. The braille cell **1** comprises eight touch pins **4**, which can be displaced in the longitudinal direction, are accommodated in openings or cavities **5** partially in the frame **2** and partially in the touch board **3**, and can be slid up and down between a retracted, low position, in which the pins **4** do not project above the top surface of the touch board **3**, and an extended, or high, position, in which the pins **4** project above the top surface of the touch board **3**, in such a manner that a user can feel the pin **4** in question when it has been placed in the high position. The small pins **4** are arranged in two rows of four pins **4** per braille cell **1**. In this way, six of the eight pins can be used to form braille symbols. The remaining two pins **4** can be used for extra information, for example upper-case letters, an accent, figures. The pins **4** each comprise a cylindrical body **6** on which there is arranged a rounded, narrow end **7**, the diameter of the thin end **7** being less than the diameter of the cylindrical body **6**, so that a shoulder **8** is produced. The openings **5** are correspondingly designed with a cylindrical narrowing **9** in the touch board **3**. When a pin **4** is pushed upwards, the shoulder **8** strikes the underside of the cylindrical narrowing **9**, so that the pin **4** cannot slide out of the frame **2**. Due to the fact that the end **7** is longer than the cylindrical narrowing **9**, the pin, if placed in the high position, projects above the top surface of the touch board **3**, so that it can be felt by the touch of a user.

A pressure-exerting member or leaf spring **10** is arranged in line with each of the pins **4**. That end of each pair of leaf springs **10** which is remote from the pins **4** is attached in the region of an end in a slidable part, or sliding part **11**. The sliding part **11** can be displaced in the longitudinal direction of the leaf springs **10**. A pair of leaf springs **10** is attached in each sliding part. Both the pins **4** and the leaf springs **10** are arranged in pairs. A displacement member or bending element **12** is placed between the two leaf springs **10** of each pair of leaf springs, which bending element can bend, by means of a control signal, in a plane which is essentially transverse to the longitudinal direction of the leaf springs **10**.

This bending element **12** is a small elongate bar which is fixed at one end **13** with respect to the frame **2**, while the other, free end **14** can bend backwards and forwards and is situated between four pairs of leaf springs which are arranged around the bending element in such a way that four leaf springs **10** are disposed on either side of the end of the bending element **12**, which leaf springs can bend in a plane which is essentially perpendicular to the bending element **12**. In this exemplary embodiment, the bending element is designed as a piezoelectric bending element, which is provided on both sides with a layer of piezoelectric material **15**, to which an electric power supply is connected. If a potential is applied to one of the layers **15**, the piezoelectric material contracts, so that as a result the bending element **12** bends. When the potential returns to the original level, the relevant layer **15** is rest red to its original shape and the bending element **12** will be straight again. Each leaf spring **10** is provided with a small projection **16**.which faces towards the bending element. The dimensions and position of the projection **16** are such that when the leaf spring **10** is situated in the at-rest position the projection lies next to the bending element **12**, while when the leaf spring **10** is extended the projection **16** is no longer situated next to the bending element **12**.

Between each leaf spring **10** and each pin **4**, there is a wedge-shaped body or wedge **17**, with a sloping side **18** and a straight side **19** which runs essentially parallel to the leaf springs **10**. For each pair of leaf springs **10**, a short wedge **20** is laced opposite the end of one leaf spring **10**, while a long wedge **21** is placed opposite the end of the other leaf spring **10**, in such a manner that the straight side **19** of the long wedge **21** and the straight side **19** of the short wedge **20** face one another. An intermediate piece **22** is placed between the short wedge **20** and the long wedge **21**. At the end **23** which faces towards the leaf springs, this intermediate piece **22** is bevelled slightly. A gap **24**, which is slightly wider than the thickness of the leaf springs **10**, is left clear between the intermediate piece **22** and the short wedge **20** and long wedge **21**. These gaps **24** each lie in line with the associated leaf spring **10**. As a result, each leaf spring **10** can be pressed or slid against the underside of the corresponding pin **4**, via the gap **24**.

The braille cell **1** works as follows. In the at-rest position, on, all the pins **4** are retracted, so that they do not project above the top surface **3** and thus cannot be detected by touch. The leaf springs **10** are likewise in the at-rest position in which the projections **16** lie next to the bending element **12**. If a specific symbol, for example a specific letter, is to be displayed in braille with the aid of the braille cell **1**, a number of control signals are generated for activating the sliding parts **11** and the bending elements **12**. The pairs of adjacent leaf springs **10** are activated one by one. In the pair of leaf springs **10** which is activated first, initially the leaf spring **10** whose free end is positioned opposite the long wedge **21** is activated. If it is necessary to display a braille symbol where the associated pin **4** has to remain withdrawn beneath the surface of the touch board **3**, a potential is applied to that piezoelectric layer **15** of the bending element **12** which faces towards the leaf spring **10** in question, this potential being of such a magnitude that the bending element bends towards the leaf spring **10** and, with the aid of the projection **16**, bends the leaf spring **10** to the side. This situation is illustrated in FIG. **4**A. However, it it is necessary to display a braille symbol where the associated pin **4** has to be extended above the top surface of the touch board **3**, the bending element **12** is not bent, so that the leaf spring **10** likewise does not bend. The sliding part **11** is then slid in the