F. GESSNER.

ACCORDION.

No. 277,264.

Patented May 8, 1883.



£ig.3.

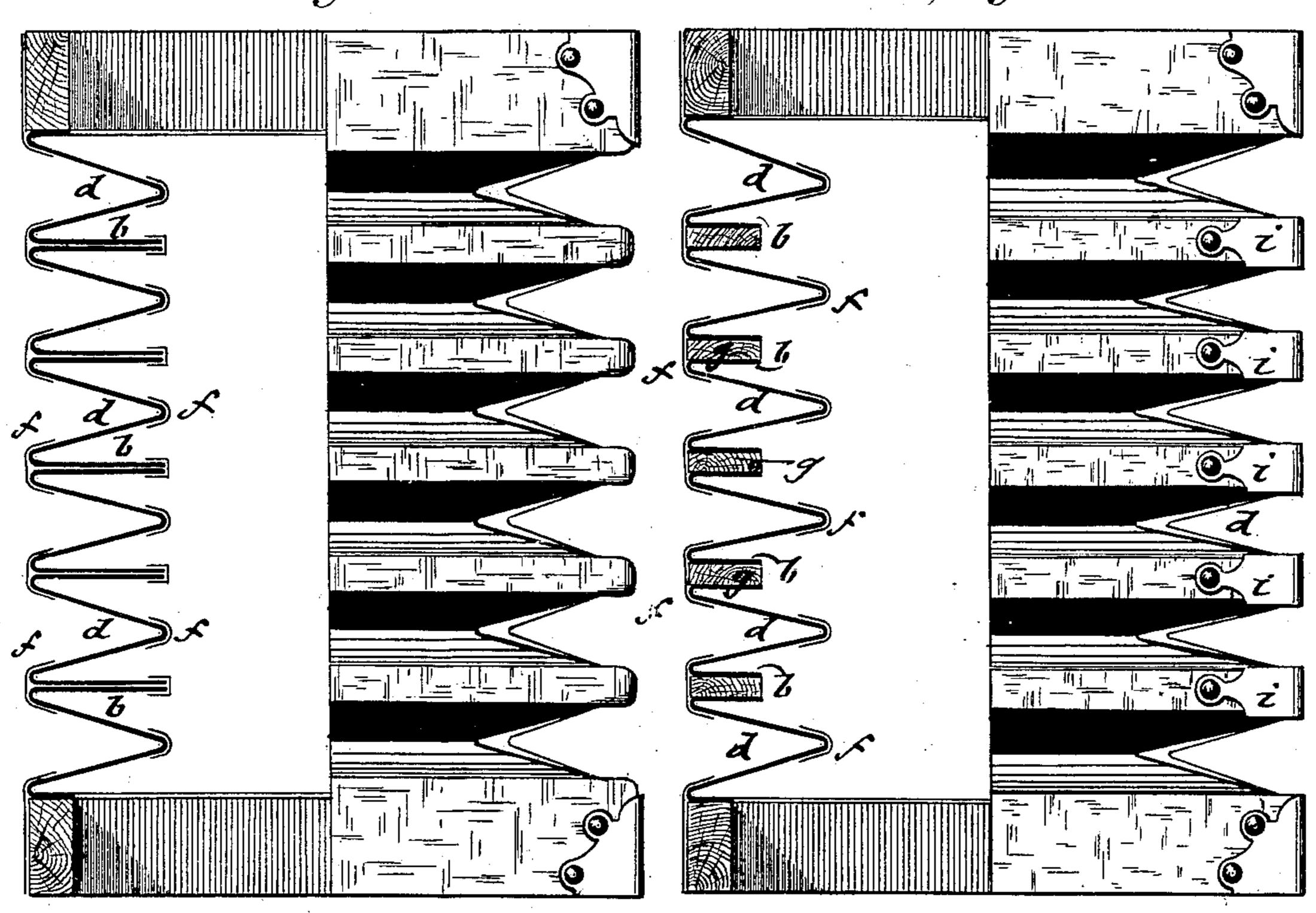
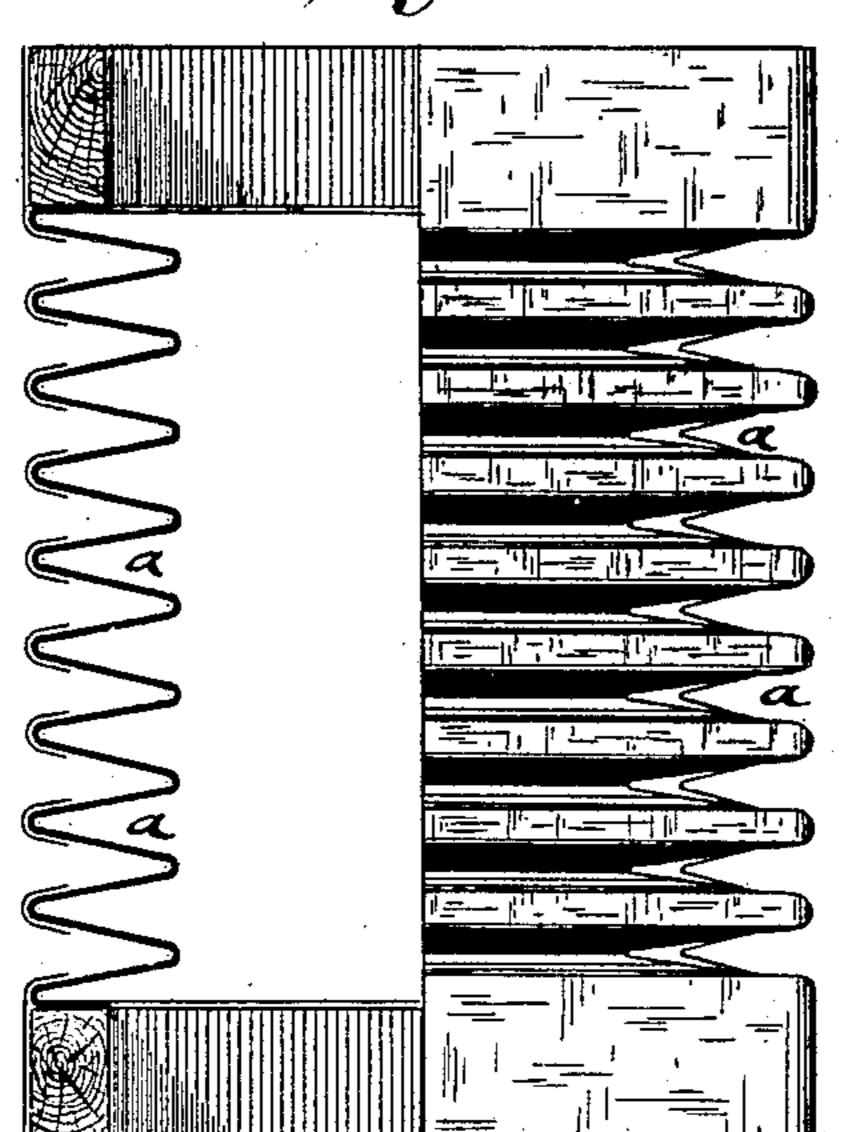


fig. L.



WITNESSES:

LAN. Rosenbaum.

INVENTOR

Triedrich Gessner Y Law Soeper.

United States Patent Office.

FRIEDRICH GESSNER, OF MAGDEBURG, PRUSSIA, GERMANY.

ACCORDION.

SPECIFICATION forming part of Letters Patent No. 277,264, dated May 8, 1883.

Application filed August 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH GESSNER, a subject of the King of Prussia, residing at the city of Magdeburg, in the Kingdom of 5 Prussia, German Empire, have invented certain new and useful Improvements in Accordions, of which the following is a specification.

This invention has reference to an improved construction of bellows for accordions, concerto tinas, and similar musical instruments, so that the same receive greater durability and permanency and an increased elasticity and expansibility.

In the accompanying drawings, Figure 1 15 represents a side elevation, one-half being in section, of the bellows of a musical instrument made according to the construction heretofore in use; and Figs. 2 and 3 are side elevations, one-half in section, of bellows made according 20 to my improved construction.

Similar letters of reference indicate corre-

sponding parts.

In the bellows in ordinary use the folds a are obtained by the simple folding of a piece 25 of pasteboard of sufficient size, which folds are re-enforced at the outer edges by strips of leather. Bellows of this construction possess very little resistance against wear, especially when the material becomes soft by moisture 30 in the air. They have to be made, furthermore, with a large number of small folds, by which the expansibility and easy handling of the bellows are considerably impeded.

To overcome these difficulties and obtain 35 bellows with larger folds, which are strengthened so as to resist wear and changes of the weather in a higher degree, the bellows are not made of one continuous piece of pasteboard as heretofore, but of a number of separate folds, 40 d, which extend outwardly, and are then bent inwardly, the inwardly-bent portions b being pasted together, as shown in Fig. 2, so as to form stiff connecting strips or partitions. The connected strips b form a stiff connection be-45 tween the folds d, which latter are of such a size that the bellows can be drawn out to a considerably greater length and can be worked with less effort than in the old construction. The outer and inner edges of the folds d are 50 re-enforced by strips f, of leather or other suit-

Table material. The connecting-partition b, formed between the folds, may be increased in strength by interposing an additional layer, g, of wood or pasteboard, to which the inwardly-bent parts of the folds d are pasted. This 55 is of special advantage in the larger size of instruments of this class, in which case the stiffening strips or partitions b are re-enforced by intermediate layers of wood, as shown in Fig. 3. The edges of the folds are in this case 60 also covered with strips of leather.

The advantages of my improved construction of bellows are that the folds can be made larger and deeper, so that the instrument may be handled with greater ease. The folds of 65 this construction are more stable, durable, and better capable of resisting exterior atmospheric pressure, which is especially of advantage in moist weather, in which bellows of the construction heretofore in use usually 70 spring inwardly, especially if they are drawn out quickly and to too great an extent. As the folds of the bellows are much larger, and as there are only about one-half as many folds as in the old construction, a greater quantity 75 of air can be drawn into the bellows, as they can be extended to greater length.

In case wood stiffening-strips g are used the folds may be furthermore protected at their outer edges by means of metal strips i, where-80 by they are still better protected against wear.

I am aware that bellows for accordions provided with wooden strips at the joints of the outer folds, the folding material or body of the bellows passing over the outer edges of 85 said strips, are not new, and I do not claim the same.

Having thus described my invention, I claim as new and desire to secure by Letters Patent-

1. A bellows for accordions, concertinas, 90 and similar musical instruments, the flexible body of which is provided with a series of permanently-closed rigid inward folds between the outward expansible folds, substantially as described.

2. A bellows for accordions, concertinas, and similar musical instruments, composed of a series of folding strips provided with integral horizontal inwardly-projecting lips cemented together, substantially as described. 100

3. A bellows for accordions, concertinas, and similar musical instruments, composed of a series of folding strips provided with integral horizontal inwardly projecting lips cemented together and re-enforced at their inner edges by strips of leather, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRIEDRICH GESSNER.

Witnesses:

B. Roi,

CARL FEHLERT.