Dec. 3, 1929. O. P. WELCH 1,738,411

REST AND EXERCISING APPLIANCE FOR INFANTS

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Fig. 1.

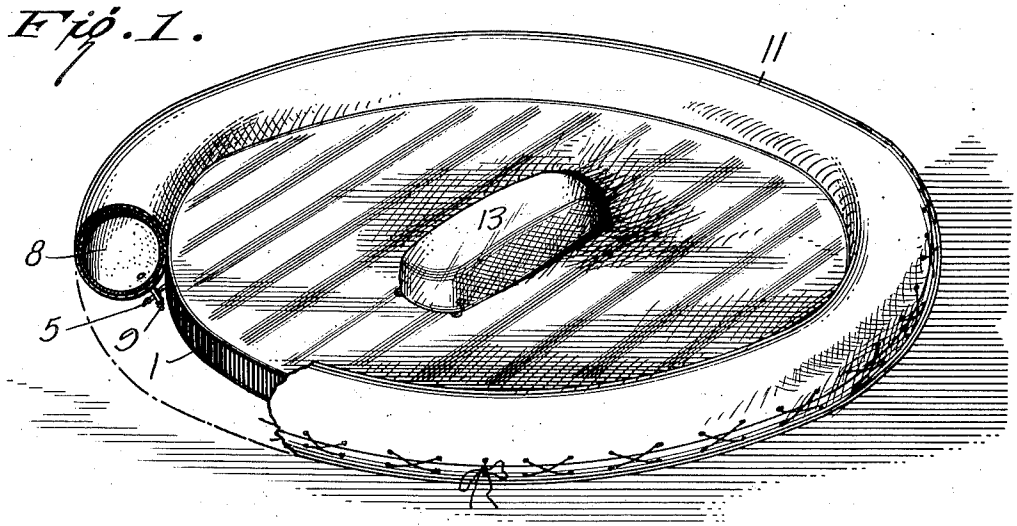
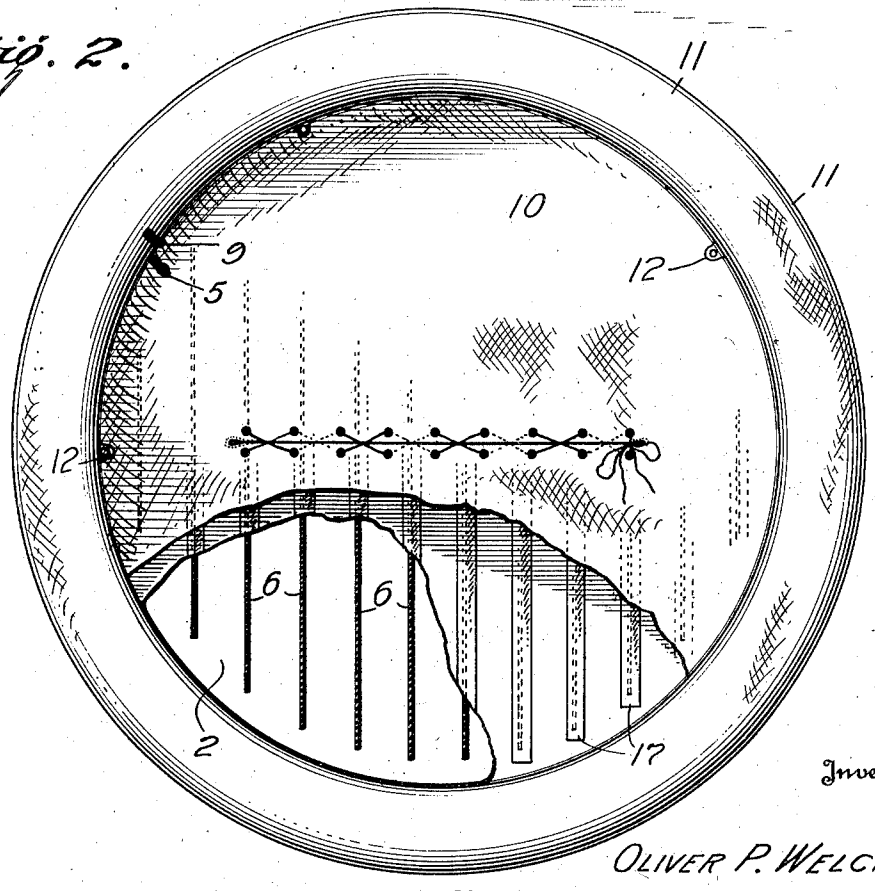


Fig. 2.



Inventor

OLIVER P. WELCH,

By Jacob Richmond

Attorney

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Fig. 3.

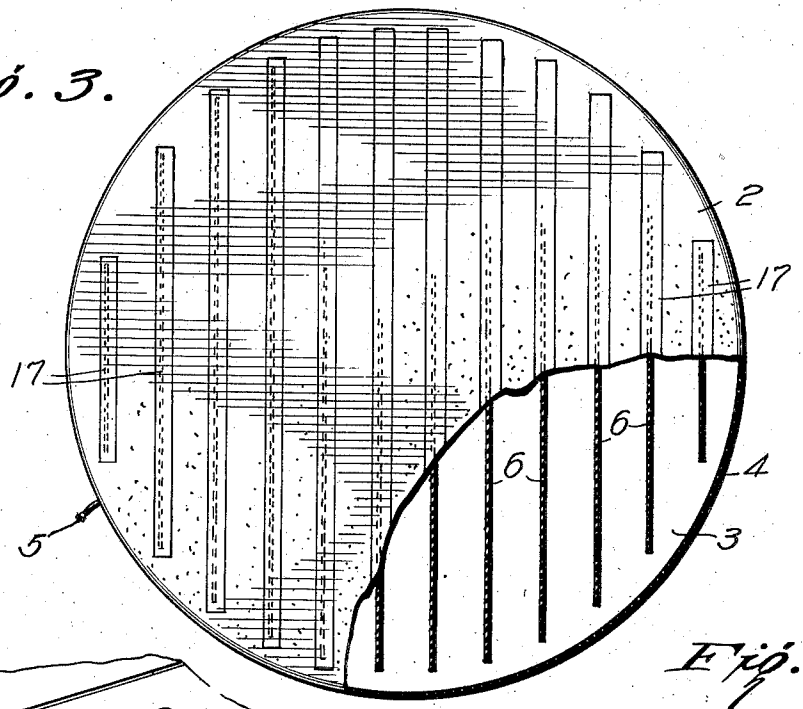


Fig. 4.

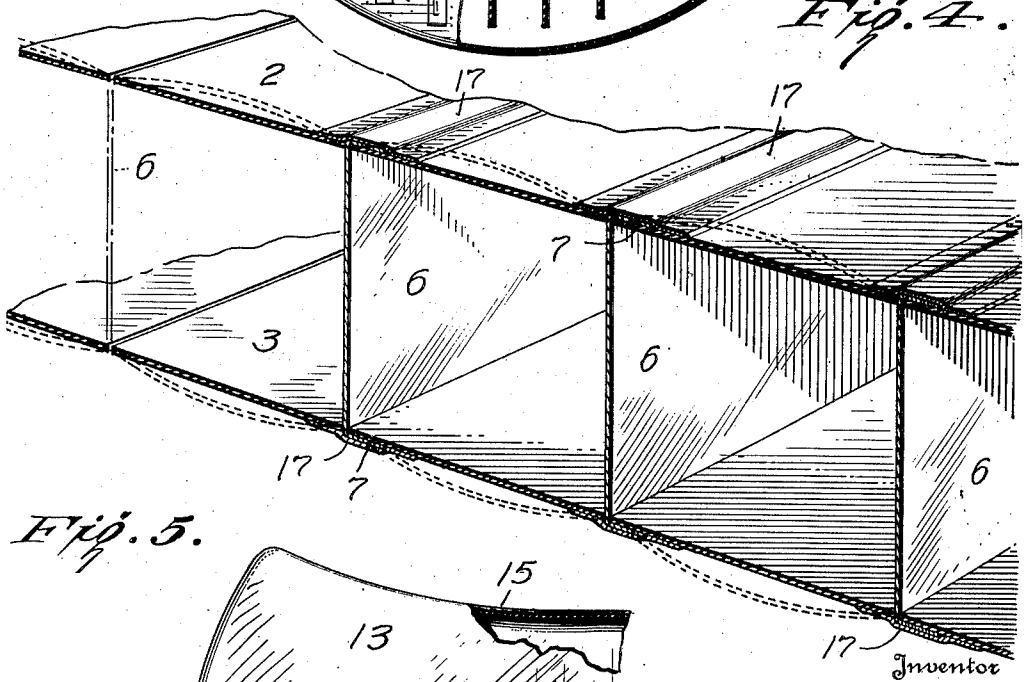
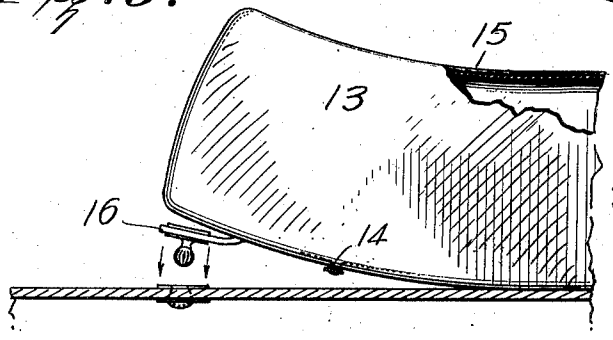


Fig. 5.



Inventor

OLIVER P. WELCH,

By Jack Richmond

Attorney

Patented Dec. 3, 1929 1,738,411

UNITED STATES PATENT OFFICE

OLIVER P. WELCH, OF SAINT IGNACE, MICHIGAN

REST AND EXERCISING APPLIANCE FOR INFANTS

Application filed February 2, 1926. Serial No. 85,511.

This invention is an appliance designed and constructed on sanitary principles with the view of permitting an infant or child of tender age to obtain certain desirable and well understood effects of a physiological nature, largely through its own efforts, while at the same time, safeguarding the infant in emergencies when it is unattended.

It is a well known fact that restless and irritable infants are often soothed and quieted when turned face downward over the knees of the attendant and gently moved so as to induce more or less pressure on and action of the abdominal walls. While the effectiveness of this treatment is universally recognized, the treatment of course requires the services of an attendant or something of a corresponding nature.

It is the principal object of my invention to provide a rest and exercising appliance that will do mechanically what has heretofore been done by the attendant, thus leaving the latter free for other duties.

Another object is to provide a simple and convenient assemblage of means for carrying out the main inventive thought; said assemblage embodying a main support or mat, an auxiliary support in the form of a body exercising block or pillow, both main and auxiliary supports being capable of inflation and deflation, and an inclosing guard also of the collapsible type; the assemblage, when not required for use, being capable of folding into comparatively small compass.

One embodiment of the invention is illustrated in the accompanying drawings, wherein

Figure 1 is a perspective view of the assembly.

Fig. 2 is a bottom plan view, with the mat cover and mat partly broken away to disclose the internal organization.

Fig. 3 is a plan view of the mat without the casing and partly broken to disclose details.

Fig. 4 is a sectional perspective of a portion of the mat structure in inflated state.

Fig. 5 is a detail of the auxiliary support or body exerciser and its mode of attachment to the main support.

According to my invention I provide a main floor support or mat element 1, constructed of upper and lower walls 2 and 3 of flexible material, such as, for example, rubber or rubberized cloth or other fabric impervious to air. Rubber or equivalent waterproof material is preferred for sanitary reasons. The mat or main support 1 may be of any desired form, polygonal or circular. In the example shown it is circular and in that form a diameter of about six feet has been found satisfactory, as providing ample range when in use and a not too bulky package to be conveniently stowed when not in use.

The upper and lower walls 2 and 3 are joined by a marginal or edge wall 4 to define a hollow body approximately three inches deep, the wall 4 carrying any suitable valve element 5 whereby the mat may readily be inflated or deflated. In order to avoid a ballooning effect under inflation, that is to say to maintain the top and bottom walls relatively flat, the flexible partitions 6 are provided to tie said walls together. The ends of the partitions terminate short of the marginal wall so as to establish intercommunicating passages for the free circulation of air. Evidently, while the mat is of general flat form, there will nevertheless be a somewhat corrugated form due to the distension of the top and bottom walls of the individual cells or passages in response to internal pressure.

The main support or mat 1 being, as indicated, a substantially flat structure from which the infant might roll, it is necessary or desirable to provide a suitable stockade or inclosing element. It is also desirable that the guard shall be of such nature as to follow out the general scheme of rest, comfort and exercise for the infant. Accordingly, I provide a ring-like guard which is disposed in abutting relation to the edge or rim of the mat. The guard is preferably a flexible tube-like structure, not unlike the inner tube of a balloon tire. It is indicated at 8 and has means, as 9, whereby it may be inflated and deflated. By way of illustration I may say that the guard 8, in diameter, is approximately

three times the height or thickness of the mat, that is to say, with a mat three inches thick, there is usually employed a guard nine inches in diameter. The annular guard snugly fits the marginal wall of the mat, prevents the infant from rolling therefrom, and is soft and yielding so as to obviate any possible injury to the child in case of violent contact.

The mat and guard are preferably covered with suitable fabric to ensure proper sanitary conditions and to provide for different color schemes. The removable mat cover or casing is indicated at 10, and the guard casing is indicated at 11. If desired, and as preferred, the guard casing may be availed of to secure the guard to the mat, and detachable means for so securing the parts is indicated at 12.

An important feature of the invention is the auxiliary support or exercising appliance, whereby the infant may receive the body exercise for which the invention was devised. This auxiliary support or appliance is preferably the pillow 13, which, likewise, is of rubber or similar fabric and capable of inflation and deflation. Its air valve is shown at 14 and its sanitary casing at 15. The pillow is removably secured to the mat by readily separable fastenings 16, of which there are generally four. Thus retained, the pillow simulates the knee of the attendant and when the infant is laid prone thereagainst, the movements of the infant, particularly its arm and leg movements will move the upper surface of the mat 1, and through the cushioning action of the contained air, transmit such movement to the pillow, with the desired effect of pressure and action of the abdominal walls and other results in accordance with well known physiological teachings.

Of course while the main purpose of the invention is to soothe or quiet restless and irritable infants without the necessity of direct handling, a practice now frowned upon by the best authorities, it is, nevertheless, apparent that the device makes an admirable play enclosure.

Having described my invention, I claim:—

1. A completely portable rest and exercising appliance for infants, including a floor pad of the pneumatic type constructed to maintain an even thickness under inflation, an air rail of materially greater diameter than the thickness of the pad, said rail being independent of the pad and secured to the edge thereof to avoid projection below the lower surface of the pad, and an independent inflatable cushion removably secured centrally of the upper surface of the pad.

2. A portable rest and exercising appliance for infants, comprising a floor pad including upper and lower walls and an edge wall, partitions connecting the upper and lower walls, said pad being inflatable and held to even thickness under inflation by said partitions, an inflatable tubular member removably secured to and in contact with the edge wall of the pad, said member lying flush with the lower surface of the pad and extending materially above the upper surface thereof, and an independent inflatable cushion secured to the upper surface of the pad within the tubular member.

In testimony whereof I affix my signature.

OLIVER P. WELCH.