A.C. Morey, Mattress, Patented Oct. 13, 1868.

Fig.1.



Fig.2.

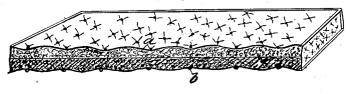


Fig.3.



Witnesses.

Albert G. Morey

UNITED STATES PATENT OFFICE.

ALBERT G. MOREY, OF CHICAGO, ILLINOIS.

IMPROVED MATTRESS.

Specification forming part of Letters Patent No. 82,975, dated October 13, 1868; antedated September 20, 1868.

To all whom it may concern:

Be it known that I, ALBERT G. MOREY, of Chicago, in the county of Cook, in the State of Illinois, have invented a new and useful Improvement in the Construction of Elastic Mattresses or Cushions; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is to furnish an elastic mattress for beds, or cushion for seats, which, while possessing the peculiar qualities of the sponge mattress or cushion, shall yet be

afforded at a less cost.

Sponge, from its peculiar cellular structure, is found to retain its elasticity under great pressure and long-continued use. The multitude of open cells form a series of arches, which are compressible when weight is applied, but return to their original expanded position when the weight is removed. Thickness (bulk) is, however, more essential in the construction of a cushion or mattress from this material than in the use of any other material, because of the slight resisting power of the

spongeola arches.

Mattresses and cushions, being intended to sustain at one time a weight varying from one hundred to even four hundred pounds, must be made of great thickness when constructed solely of sponge, as otherwise the structure is temporarily flattened, so that the body presses almost directly upon the hand and non-elastic support beneath the mattress or cushion. To remedy this defect, and to save to the consumer the necessity of providing an additional mattress or cushion to intervene between the upper mattress or cushion and the supportingframe, is the object of my invention, and I accomplish this result by alternating layers of elastic sponge with layers of some semielastic material, such as the woody scrapings or fiber known as "excelsior," or moss, tow, sea-grass, hay, straw, husk, palm-leaf, manila,

I do not confine myself to any exact proportions of the sponge and the semi-elastic substances named, as different consumers require mattresses of different degrees of elas-

ticity.

Figure 1 represents a mattress of three layers of equal thickness, the top layer, a, being of elastic sponge, the central layer, b, being of "excelsior," (so called,) and the bottom layer,

c, being of moss. Fig. 2 represents a mattress of two layers, the top layer, a, being of elastic sponge, the bottom layer, b, being of "excelsior," (so called.) Fig. 3 represents a mattress of three layers of equal thickness, the top and bottom layers, a a, being of elastic sponge, and the center layer, b, being of "excelsior," (so called.)

In Fig. 1 the sponge is supported by two layers of semi-elastic material, each of different degrees of elasticity, and in this structure the springy nature of the lower layer of moss sustains the "excelsior" or woody fiber constituting the middle stratum, while the whole is surmounted by a layer of elastic sponge, thus forming an elastic and highly

serviceable mattress.

In Fig. 2 we secure only the benefits to be derived from the employment of sponge in combination with a single less elastic material. The fibrous material constituting the bottom layer, however, so cushions the more elastic sponge used for the upper layer as to secure a more comfortable mattress than could be produced from unsupported sponge, unless said sponge were employed in great bulk to the great increase in the cost of the structure.

In Fig. 3 we have a reversible mattress, the two distinct layers of sponge being supported by a middle layer of semi-elastic material. Either side of the mattress can thus be used

as bottom or top, indiscriminately.

I do not claim constructing a mattress or cushion of sponge, as I am aware that this has heretofore been used; nor do I claim constructing a mattress or cushion of "excelsior," moss, tow, sea-grass, hay, straw, husk, palmleaf, manila, or savanilla, as these have long been in common use; but

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A mattress or cushion composed of al ternate layers of elastic sponge and some semi-elastic material, substantially in the manner and for the purpose set forth.

2. Supporting one or more layers of elastic sponge with some less elastic substance in the construction of mattresses or cushions, substantially in the manner and for the purposes described.

ALBERT G. MOREY.

Witnesses:

H. WALLER, R. F. CLARK.