E. HACKH.

TOY PROJECTILE.

APPLICATION FILED JAN. 24, 1913.

1,081,037.

Patented Dec. 9, 1913.

Fig. 1.

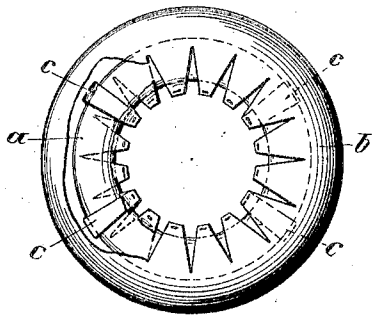


Fig. 2.

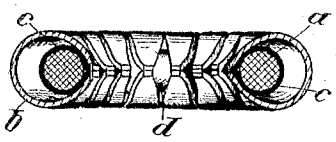


Fig. 3.

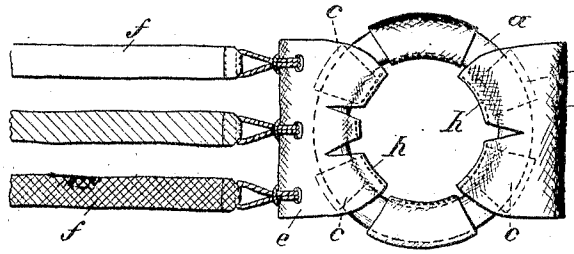


Fig. 4.

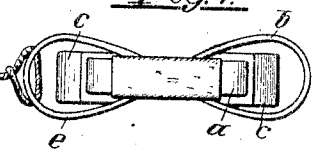


Fig. 5.

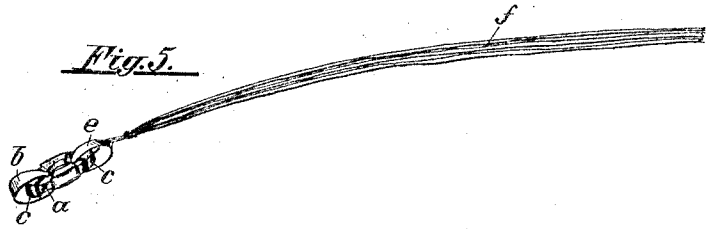
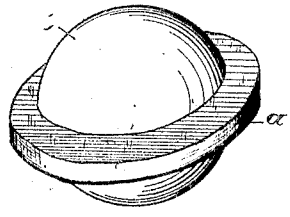


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

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TOY PROJECTILE.

1,081,037. Specification of Letters Patent. Patented Dec. 9, 1913.

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To all whom it may concern:

Be it known that I, EUGEN HACKH, a subject of the Emperor of Germany, and a resident of Stuttgart, Nuremberg, Germany, have invented certain new and useful Improvements in Toy Projectiles, of which the following is a specification.

My invention relates to toy projectiles and more particularly to such devices which are manually thrown or slung.

The object of my improvement is the production of a simple and efficient device of the character mentioned having a frame body protected by a buffer.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which—

Figure 1 is a side view of a toy projectile embodying my invention and having a portion of the buffer covering removed to expose underlying parts, Fig. 2 is a central section of the same, Fig. 3 is a side view of a slightly modified form of construction, Fig. 4 is an edge view of the same, Fig. 5 is a view, in perspective, of the same in flight, and Fig. 6 illustrates a different modification of the device in which the buffer member is situated on the inside of the firmer body.

The preferred form of construction as illustrated in the drawing comprises an annular body *a* made of any suitable substance and may be of elastic, flexible or nonyielding material as desired. However, I prefer to use a resilient material such as india rubber or a composition consisting largely of india rubber to cause the device to rebound upon alighting after having been thrown. Situated around the body *a* are a plurality of straps *c* spaced apart and having their ends disposed on the inner side of the annular body *a*. Said straps are preferably formed of leather but any other suitable substance may be used.

A buffer *b*, composed of sheet material having angular slits *d* in its edges, is disposed around body *a* and straps *c* with its edges secured to the ends of straps *c* by means of stitchings *h*, or their equivalent. The buffer *b* is made of a soft flexible material and preferably possessing more or less flexibility, leather answering the purpose very nicely but any other substance may be used when so desired. The cross-section of buffer *b* is larger than the cross-section of straps *c* and disposed eccentrically leaving an air space, crescent shaped in cross-section, between the straps *c* and buffer *b* substantially as indicated in Figs. 1 to 5 inclusive.

In the construction illustrated in Figs. 1 and 2 the buffer *b* extends entirely around the annular body *a* and is intended for use where a projectile is to be thrown with any portion thereof being the front portion or where the projectile is revolved during its flight through the air. The construction shown in Figs. 3 to 5 inclusive shows the buffer *b* only covering a small portion of the annular body *a*. This portion being the forward portion of the projectile while in flight through the air. The rear portion of the projectile being provided with a buffer *e* similar in construction and its manner of being secured as buffer *b*. Buffer *e* is provided with a number of streamers or tails *f* secured thereto substantially as indicated. The tails *f* are provided to guide the device and prevent its rotation while in the air.

The modification shown in Fig. 6 illustrates the annular body *a* made of a soft flexible material and provided with a resilient buffer member *g* disposed in the opening of the annular body *a* and secured thereto. The buffer *g* not only protects the sides of annular body *a* but its resiliency is imparted to the annular body *a* upon the latter coming in contact with a solid substance thus giving the device greater rebounding power.

In operation, the device may be used as a quoit or any other game in which a projectile is thrown or hurled through the air. With the use of the tails *f* shown in the modifications illustrated in Figs. 3 to 5 inclusive the body *a* and its buffer coverings may be swung in the manner a sling is swung before it is thrown. These tails *f* providing a means for giving the device greater traveling power through the air as will be readily understood. The modifications illustrated in Figs. 1, 2 and 6 are held flat or in any other desired manner in the hand and hurled edgewise or in any other manner desired. The tails *f* may be of different colors when so desired to designate opponent sides in a game or for any other purpose it may be desired.

While I have illustrated and described the preferred forms of construction for carrying my invention into effect, these are capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A toy projectile comprising a frame body; straps around said frame body; and a protecting buffer around said frame body and said straps and secured to the latter, substantially as described.

2. A toy projectile comprising a frame body; closely fitting straps around said frame body; and a loosely fitting protector buffer covering around said body and said straps and secured to the latter, substantially as described.

3. A toy projectile comprising a frame body; closely fitting straps around said frame body; a loosely fitting protecting buffer covering of sheet material having triangular portions cut away from its edges and said edges fitted to the ends of said straps; and means securing the edges of said buffer covering and the ends of said straps securely together, substantially as described.

In testimony whereof I affix my signature, presence of two witnesses.

EUGEN HACKH.

Witnesses:
ERNEST ENTENMANN,
INGO HACKH.