E. S. PEILE, J. R. JOHNSON & J. H. THOMPSON. BAG SPREADER FOR TEA PACKING MACHINES AND THE LIKE.

APPLICATION FILED JAN. 27, 1905.

2 SHEETS-SHEET 1. Edgar Stoddart Peile James Rithie Johnson Walter 6. Hart William F. Harriso

No. 803,357.

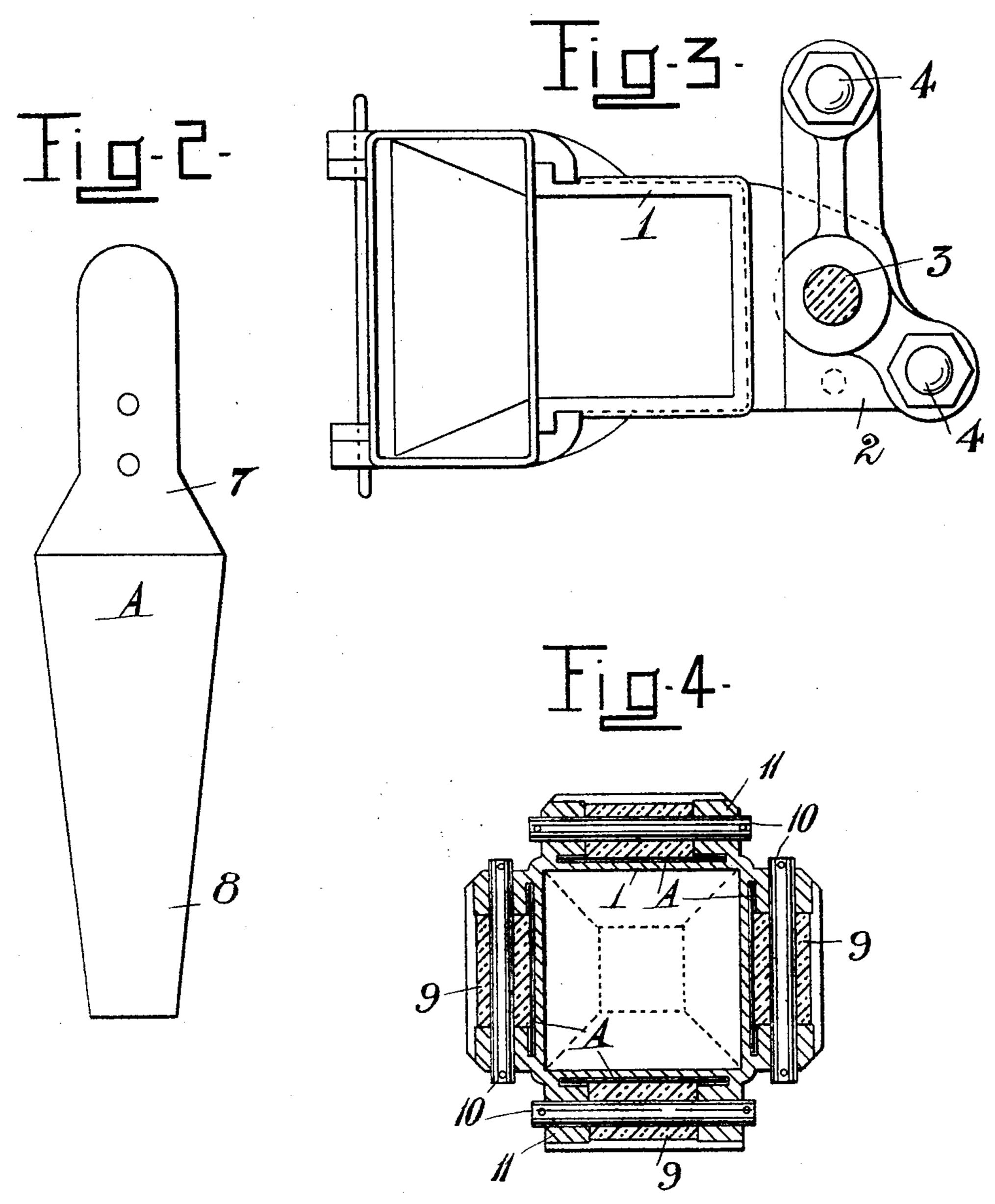
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UNITED STATES PATENT OFFICE.

EDGAR STODDART PEILE, OF ELSTERNWICK, AND JAMES RITCHIE JOHNSON AND JAMES HENRY THOMPSON, OF SOUTH MELBOURNE, VICTORIA, AUSTRALIA, ASSIGNORS TO JAMES ORMAND AND RANDAL JAMES ALCOCK, OF MELBOURNE, VICTORIA, AUSTRALIA.

BAG-SPREADER FOR TEA-PACKING MACHINES AND THE LIKE.

No. 803,357.

Specification of Letters Patent.

Patented Oct. 31, 1905.

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To all whom it may concern:

Be it known that we, Edgar Stoddart Peile, draftsman, residing at 7 Liscard street, Elsternwick, James Ritchie Johnson, engineer, residing at the Tyne Foundry, Yarra Bank, South Melbourne, and James Henry Thompson, tea expert, residing at Queen's Bridge street, South Melbourne, in the State of Victoria and Commonwealth of Australia, subjects of the King of Great Britain, have invented an Improved Bag-Spreader for Tea-Packing Machines and the Like, of which the following is a specification.

This invention relates to machines for packing tea and like divided substances in retail quantities. With these machines the previously-weighed tea is fed down a vertically-reciprocating chute into the bags, cartons, or the like placed in molds on a rotating table, when a ram descends and packs the tea, &c., tightly therein, after which the ram and the chute ascend until the next bag is in position for filling. Now it is found in practice that the chute in descending is inclined to catch the edges of the bag and crumple same, so that the whole of the tea is not discharged into said bag, and generally a bad

package is the result.

The object of this invention is therefore to provide a spreader which will hold the four sides of the bag open to their fullest extent to allow of the uninterrupted entrance of the chute and ram. This spreader consists, briefly, of four tapering plates hinged to the spreader which enter the bag in the form of a wedge and are adapted to open out when the chute is at the limit of its descent, and thus protect the edges of the bag.

The invention will now be described in detail with reference to the accompanying

drawings, wherein—

Figure 1 is a side elevation of the chute and spreader with parts in section. Fig. 2 is a front elevation of a spreader-plate; Fig. 3, a plan of the chute. Fig. 4 is a horizontal section on line IV IV, Fig. 1.

According to this invention the chute 1 is secured by a lug 2 to a vertical rod 3, adapted to be intermittingly reciprocated, said chute being guided by two rods 4 4, mounted on the rod 3 and sliding in sockets 5 on the fixed

table 6, which encircles the chute and

spreader.

The spreader comprises four thin plates A, inclined outwardly at their upper ends 7 and 55 tapering at their lower ends 8, as shown in Figs. 1 and 2. The inclined upper end 7 of each plate is bolted to a correspondingly-inclined hinge, and the said inclined hinge is formed of two sections Y and 9, the lower 60 face of the section 9 being indicated by the reference character Z. Between the said sections Y and 9 the upper end 7 of the plate A extends and is secured in position. The section 9 of the hinge is broadened at the bot- 65 tom, so as to form the bottom thereof of inverted-T shape, and with two laterally-extending lugs X, adapted to abut against the stops 14. The section 9 is pivotally mounted on a pin 10, extending through lugs 11 11 on 70 the chute 1, the whole forming a hinge upon which the plates A may swing. A spring 13 on the chute keeps the hinge-plate 9 normally out and the spreader-plates closed in the form of a wedge, as indicated by dotted 75 lines in Fig. 4. Upon the descent of the chute the hinge-plate contacts with the rim 12 of the table 6, so that the spring 13 is compressed and the spreader-plates are opened out into a rectangular form, as shown 80 in Fig. 1, thus holding the four sides of the bag fully open for the descent of the ram. Stops 14 14 on the lugs 11 11 engage the bottom end of the hinge-plates 9, and so limit the swing of the spreader-plates.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is—

1. An improved bag-spreader for tea-pack- 90 ing machines and the like consisting of four hinged tapering plates adapted to enter the bags in the form of a wedge and means for opening same out into a rectangular shape substantially as set forth and illustrated.

95

2. An improved bag-spreader for tea-packing machines and the like comprising four thin plates inclined outwardly at their upper ends and tapering at their lower ends, and hinged to a vertically-sliding chute and noo means for automatically closing in and opening out the lower ends of said plates substan-

tially as and for the purpose set forth and as illustrated.

3. An improved bag-spreader for tea-packing machines and the like comprising four thin plates inclined outwardly at their upper ends and tapering at their lower ends, an inclined hinge-plate attached to each spreader-plate and pivotally mounted upon a pin extending through lugs on the chute, a spring engaging the upper end of each hinge-plate, a fixed table encircling the spreader and

stops on the chute substantially as and for the purpose set forth and as illustrated. In testimony whereof we have hereunto set our hands in presence of two subscribing 15 witnesses.

EDGAR STODDART PEILE. JAMES RITCHIE JOHNSON. JAMES HENRY THOMPSON.

Witnesses:

EDWARD WATERS, EDWARD NEEDHAM WATERS.