UNITED STATES PATENT OFFICE.

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MEANS FOR OPENING TINS OR THE LIKE.


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To all whom it may concern:

Be it known that I, ANDREAS JENSSEN, a subject of the King of Norway, residing at Stavanger, in the Kingdom of Norway, have invented certain new and useful Improvements in Means for Opening Tins or the like, of which the following is a specification.

The present invention relates to an improvement in means for opening tins or the like of the kind in which within the rim or edge of the cover is placed a weakening-line which terminates in an opening tongue.

Such tins have hitherto usually been opened by means of a tin opener provided with a slit and a sharp point or the like which breaks through the cover by the end of the opening tongue, whereafter this is removed in order to serve as a fastening for the opener to complete the opening of the tin.

According to the present invention there is provided in or adjacent the opening tongue itself within the weakening line running around the cover a smaller tongue shaped weakening part, which is adapted to be pressed down into the tin by means of a specially constructed tin opener, which is so formed as to press down the said tongue shaped weakening part simultaneously as it breaks through the weakening line itself.

The tin may then readily be opened by means of a hook-formed share or "bit" with which the tin opener is also provided and which engages under the part left between the said tongue formed weakening part and the weakening line. By turning of the opener the opening tongue is torn up and by continued turning the cover is removed.

The invention is illustrated in the accompanying drawing, in which:

Figure 1 shows a tin seen from above and with a weakening line running around the cover, which line in one corner terminates in an opening tongue.

Fig. 2 shows a tin where the opening tongue is placed in the middle of one of the short sides of the tin.

Fig. 3 shows the tin opener in the position before the cover is broken through.

Fig. 4 shows the same in position after the cover is broken through.

Fig. 5 shows the broken through tin with the opener placed in correct position for the unrolling of the cover.

1 is the weakening part formed by a suitably curved weakening line and 2 the weakening line running along the rim or edge. 3 is the opener which at one end, preferably in the part which serves as handle, is provided with a hook 4 adapted to engage under the rim 5 of the tin. The tin opener is also supplied with two sharp teeth or projections 6 and 7 so placed that the projection 6 contacts with the cover at the weakening line 65 and the projection 7 at the opening part 1.

By lowering the opener in the direction shown by the arrow the projections 6 and 7 will break through the cover on the above-mentioned spots.

The opener is then placed with the hook shaped share or "bit" engaging under the part 9 (Fig. 5) whereafter the cover is removed. The hook-shaped share or bit is passed through the opening left by the displaced tongue, and under the adjacent bridge of metal and into the opening which has been formed at the main weakened line of the metal; it is then turned on its longitudinal axis thereby rolling up the metal of the cover which is meantime severed along the marginal weakened line.

The invention may with the same advantage be used on tins of rectangular, acute angled, oval or round form, while it is obvious that the weakening part may be given any suitable form.

What I claim and desire to secure by Letters Patent of the United States is:

1. Means for opening tins or the like comprising a weakening line formed in the cover, a smaller U-shaped weakening line formed adjacent said first mentioned weakening line with the legs of the U extending away from the weakened line and means for piercing said cover, substantially simultaneously at two points separated by unweakened material, substantially as described.

2. Means for opening tins or the like comprising a continuous weakening line formed in the cover around the edge or rim thereof, a smaller U-shaped weakening line and means for simultaneously pressing down said smaller tongue shaped weakening part and piercing said cover on said continuous weakening line, substantially as described.

3. Means for opening tins or the like comprising a continuous weakening line formed in the cover, a smaller U-shaped weakening line and an implement provided with two
projections adapted simultaneously to press down said smaller tongue shaped weakening part and pierce said cover on said continuous weakening line, substantially as described.

4. Means for opening tins or the like comprising a continuous weakening line formed in the cover a smaller U-shaped weakening line formed within and adjacent to said continuous weakening line and an implement provided with two projections adapted simultaneously to press down said smaller tongue shaped weakened part and pierce the cover on said continuous weakening line and an implement provided with a hook adapted to engage the rim of the cover and with two projections adapted simultaneously to press down said smaller tongue shaped weakened part and pierce the cover on said continuous weakening line said implement also being provided with a part adapted to engage under the broken down part of the tin cover to facilitate the removal of the cover substantially as described.

6. A sheet metal cover having formed therein a weakened opening line extending along and within the margin of the cover and a short weakened line, separated from said opening line by a short and narrow bridge of unweakened metal.

7. Means for opening tins or the like comprising a weakened line formed in the cover, a smaller U-shaped weakened line formed adjacent said first mentioned weakened line, with the legs of the U extending away from the weakened line.

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

ANDREAS JENSSEN.

Witnesses:
TINN BERNTSEN,
JERE SLAGELAND.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D.C."