Aug. 15, 1961 T. LA MAIDA 2,995,758

GRADUATION CAP

Filed Dec. 9, 1957

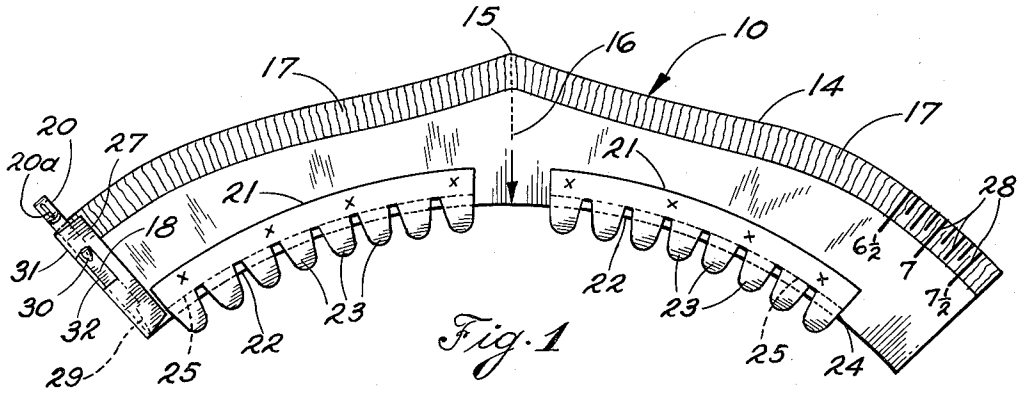


Fig. 1

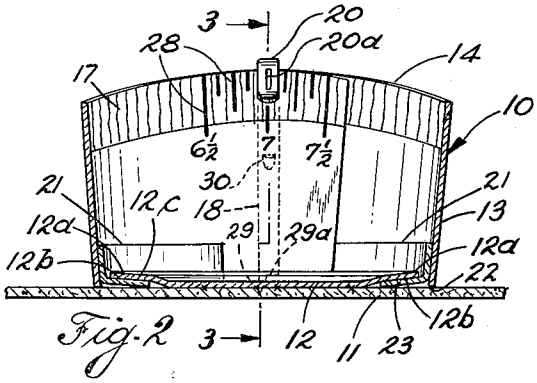


Fig. 2

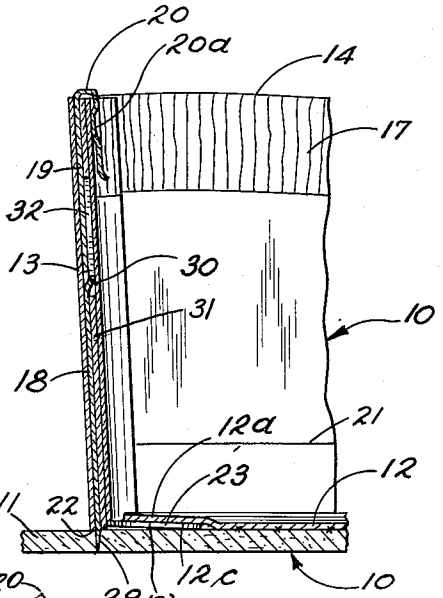


Fig. 3

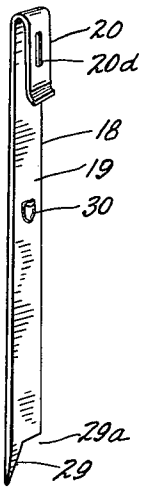


Fig. 4

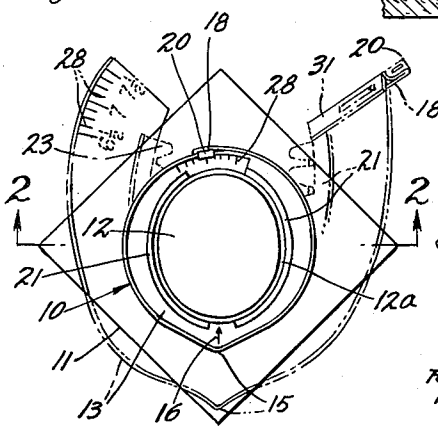


Fig. 5

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GRADUATION CAP

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This invention relates to improvements in a graduation cap, also known as a "mortarboard," and more particularly, it relates to improved means for securing the locking tongues disposed at the top of the crown to a locking member disposed on the bottom surface of the cap top. The invention also relates to means for locking togther the longitudinal edges of the crown band and releasably securing such crown band end to the underside of the top. The foregoing improvements are adapted to be used on graduation caps of the type disclosed in my Patent No. 2,629,874, issued March 3, 1953, and my co-pending patent application Serial No. 665,566, filed June 13, 1957, now Patent No. 2,899,682, dated August 18, 1959.

Graduation caps, of the types above referred to, comprise a substantially rigid square top portion of the crown, having a flat oval-shaped securing member attached to the middle portion of the bottom surface of the top, the marginal portion of said securing member being unsecured providing a space or groove between the unsecured portion of the securing member and the bottom surface of the top. The side or body of the crown of the cap is formed from a one-piece strip or band, of suitable size and form, to fit around a human head when it is secured to the top, and the upper edge of the crown body is provided with locking tongues which are engaged in the space or groove around the outer margin of the securing member, when the top edge crown body is folded around the securing member with the body extending downwardly therefrom.

The locking tongues may be formed integrally with the top edge portion of the crown body, or they may form a part of a separate securing strip having its body portion secured to the inner surface of the side crown body with its top margin spaced inwardly of the top margin of the crown body a short distance, causing the upper edge of the crown body to be squarely seated against the underside of the top.

The top margin of the crown body is locked to the flat oval-shaped securing member disposed on the underside of the top of the crown by inserting the locking tongues in the space or groove around the outer margin of the securing strip. I have discovered that by forming or crimping the margin of the securing strip, so that such portion is spaced from the underside of the cap a short distance, on the order of 1/16", insertion of the locking tongues is greatly facilitated, thereby permitting the side crown body to be quickly and easily secured to the underside of the top.

I have also discovered that by providing a releasable locking clip having a pointed end adapted to be inserted in the underside of the top and a portion clamping together the two overlapping ends of the side crown body, the side crown body is firmly locked or secured to the bottom surface of the top and any tendency of the crown body to become separated or pull away from the top is overcome.

Therefore, an object of this invention is to form a securing member on the undersurface of the top, of a cap of the type described, with its marginal portion spaced from the lower surface of the top a short distance, for facilitating the insertion of the locking tongues in said grooves in order to secure the side crown body to the cap top, the foregoing formation of the securing member being accomplished by relatively simple and inexpensive means.

Other objects of this invention are, to provide a simple, effective and relatively inexpensive means for clamping or locking together the overlapping edge portions of the side of the crown by means adjustable to provide various crown sizes, said means being quickly and readily operated, and providing means whereby relative rotation between the crown body and the securing member is prevented, and the top edge of the crown body is prevented from pulling away or separating from the lower surface of said top, the foregoing being accomplished by a single, relatively simple operation.

Other objects of this invention are, to provide a cap of the type described, formed of component parts, each formed by relatively simple and inexpensive operations, said cap being constructed and arranged in such manner that it may be shipped in flat disassembled form and readily assembled by simple folding and forming operations, said cap being readily adjustable to suit individual size requirements, and being neat and attractive in appearance, and serviceable in use.

These and further objects of the invention will be apparent during the course of the following description.

In the drawings forming a part of this specification—

FIG. 1 is a view of the blank from which the side or body of the crown of the cap is formed, illustrating the locking tongues and the securing clip for anchoring the crown body to the top;

FIG. 2 is a sectional view of the inside of the crown band illustrating its attachment to the securing member and showing the securing clip in its operative position, clamping the side crown body to the underside of the cap, taken on line **2—2** of FIG. 5;

FIG. 3 is a broken sectional view taken on the line **3—3** of FIG. 2, drawn to a larger scale, and illustrating the securing clip in its clamping position;

FIG. 4 is a perspective view of the securing clip; and

FIG. 5 is a schematic assembled bottom plan view, showing the procedure of assembly in phantom.

The illustrative embodiment of the invention herein disclosed is applied to a complete graduation cap **10**, partially illustrated in FIGS. 2, 3 and 5 which includes a square crown top **11**, hereinafter referred to as the top, and a side or crown body **13**, formed of a strip of material adapted to be fitted around the head of the user when the parts are fully assembled, the blank from which the crown body is formed being illustrated in FIG. 1 and hereinafter is some times referred to as a blank. The top **11** may be formed of cardboard, fiberboard or other materials permitting the ready insertion of a securing clip, hereafter described.

A flat oval-shaped securing member **12**, adhesively secured to the undersurface of the top **11**, is provided with an unsecured portion **12***a* around its outer margin, said portion **12***a* being bent away from the plane of the securing member **12** and having its edge portion **12***b* spaced from the underside of the top **11** a short distance, on the order of 1/16", permitting the ready insertion of locking tongues therein, for locking the top edge of the crown body **13** to the underside of the top **11** through the cooperation of the tongues and the securing member. The crimping or forming of the unsecured marginal portion **12***a* of the securing member **12** may be accomplished in any suitable manner.

The form of the blank, from which the crown body **13** is formed, is of circular configuration along its top margin, while the lower edge margin **14** is of a configuration corresponding to that of the familiar brace or bracket which comes to a point at its middle portion **15**. A transverse scoring line **16**, in line with the point **15** of the side of the crown body **13**, permits it to be readily

folded for shipment. If desired, the lower edge portion of the crown body **13** may be embossed for decorative purposes, as illustrated at **17**. The upper edge portion **22** of the crown body **13** is provided with securing strips **21** adhesively secured thereto, the same being provided with a plurality of integrally formed locking tongues **23** formed by cutting away portions along one edge of the securing strip **21**. The locking tongues **23** are adapted to be folded inwardly from the sides of the crown **13** and inserted in the groove or space **12***c* along outer margin of the securing member **12**, and the sides of crown body **13** extend downwardly therefrom. The securing strips **21** are disposed inwardly of the top edge **22** of the crown a relatively short distance, indicated at **24**. A scoring line **25** along the top margin of the securing strip **21** permits the ready crimping or bending of the locking tongues **23**.

A locking clip **18**, fully illustrated in FIG. 4, includes a flat body portion **19**, a bent-over or crimped portion **20** at the top provided with a detent **20***a*, while a pointed formation **29***a* terminating in a point **29** is disposed at the opposite end, and a stop member **30** projecting from the same side of the body as the clamping portion **20** of the clip **18** is on, is disposed intermediate the top and bottom thereof. A flat sleeve **31**, extending transversely of the crown body **13** at one end thereof, is formed by folding over the edge portion of one end of the crown body and adhesively securing it, as indicated at **27**. The width of the unsecured or open portion of said sleeve **31** is slightly larger than the width of the locking clip **18** in order to permit it to be reciprocated therein. The sleeve **31** is provided along its inwardly disposed side with a cut-away portion or slot **32** intermediate the ends of said sleeve, which is engaged by the stop member **30** when the locking clip **18** is in its retracted position, illustrated in FIG. 1, in which position the bent-over portion **20** of the clip **18** is beyond the lower margin of the crown band, and the point **29** of the clip is wholly within the sleeve member **31**. Thus, the stop member **30** of the locking clip **18** serves to limit the outward movement of the clip **18** in the sleeve **31**.

The crown body **13** is united with the lower surface of the top **11** by disposing the top **11** with the underside disposed upwardly, and then folding the crown body **13** around the outer periphery of the securing member **12**. The locking tongues **23** are then inserted in the groove **12***c* along the outer margin of the securing member **12**. The ends of the crown body **13** are then overlapped with the end having the locking clip **18** disposed outwardly of the other end with the bent-over portion **20** facing inwardly. When the two ends of the side crown body **13** are thus overlapped, the locking clip **18** is in its retracted position, illustrated in FIG. 1, having the bent-over portion **20** extending toward the center of the cap. The lower margin of the opposite end of the crown body **13**, which is disposed inwardly of the opposite end, is provided with size marks or indicia **28** disposed along the lower margin which indicate the size of the crown band. Thus, the two longitudinal ends of the crown body **13** are overlapped a predetermined amount corresponding to the hat size desired.

When the ends of the crown body **13** are thus overlapped the desired amount to provide the head size desired, as indicated by the position of the bent-over portion **20** of the locking clip **18** with reference to a specific size indicia, the locking clip **18** is pressed toward the underside of the top **11**, causing the pointed formation **29** to become embedded in the material of the top **11**, while the clamping portion **20** securely clamps the two end portions together, as illustrated in FIG. 2. The detent **20***a* in the clamping portion **20** of the locking clip **18** bears against the material of the inner disposed crown body end for securely retaining the ends of the crown body together. With the crown body **13** thus mounted around the securing member **12**, and the locking clip **18** disposed as above described, longitudinal movement of the crown body **13** around the securing member **12** is prevented, and the two lower overlapped margins of the crown body **13** are firmly clamped together, and any tendency of the crown body **13** to pull away from the underside of the top **11** is overcome.

The crown body **13** can be readily separated from its foregoing assembled position by simply pulling the locking clip **18** away from its embedded position in the top **11** until the stop member **30** is prevented from further movement by its engagement with the margin of slot **32** of the sleeve **31**. The locking tongues **23** are then removed from their engagement in the groove **12***c* of the securing member **12**. The crown body **13** may then be removed and folded transversely along the scoring line **16**.

The locking clip **18** is positioned and arranged in such manner that the pointed formation **29** at the bottom thereof extends beyond the lower margin of the clip **18** by a distance slightly less than the thickness of the top **11**, so that the clip **18** can be embedded in the top **11** sufficiently for holding purposes without having the pointed formation **29** projecting through the upper surface of the top **11**. The upper margin of the slot **32** of the sleeve **31** is disposed in such manner that it limits the outward movement of said clip as the outer margin of the slot is engaged by the stop member **30**, and when the stop member **30** is thus engaged, the pointed formation **29** at the end of the clip **18** is fully retracted from its position in the top **11**, and the bent-over or clamping portion **20** of the clip is beyond the outer margins of the overlapped ends of the crown body. Thus, when the crown body **13** is mounted on the underside of the top **11**, and the locking clip **18** is disposed in its engaging position illustrated in FIGS. 2 and 3, the bent-over portion **20** of the locking clip **18**, reciprocably mounted in the sleeve **31** of the outwardly disposed end of the crown body **13**, clamps the overlapped crown body ends together and prevents relative movement of such ends, either longitudinally or transversely. With the locking clip **18** in this position, the pointed formation **29** at the inner end thereof projects into the lower surface of the top **11** and firmly anchors the crown body **13** thereto.

Having thus described this invention in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains to make and use the same, and having set forth the best mode contemplated of carrying out this invention, I state that the subject matter which I regard as being my invention is particularly pointed out and distinctly claimed in what is claimed, it being understood that equivalents or modifications of, or substitutions for, parts of the above specifically described embodiment of the invention may be made without departing from the scope of the invention as set forth in what is claimed.

What is claimed is:

1. A graduation cap comprising, a flat top member, a flat oval-shaped securing member secured to the underside of said flat top member and provided with an unsecured portion around its outer margin, a side crown body extending downwardly from said top member, a multiplicity of locking tongues extending from the upper margin of the side crown body adapted to be secured under the unsecured marginal portion of the flat oval-shaped securing member, said side crown body having overlapping end portions and a reciprocably mounted locking member disposed transversely in the end portion of one end of said side crown body end portion, said locking member having a pointed formation at its upper end inserted in the flat top member and a U-shaped clamping portion at its outer end clamping together the ends of the side crown body member.

2. A graduation cap comprising, a flat top member, a flat oval-shaped securing member secured to the underside of said flat top member and provided with an unsecured portion around its outer marginal edge, a head-

engaging side crown body extending downwardly from said top member, said side crown body having a multiplicity of locking tongues releasably secured beneath said unsecured marginal portion of the flat securing member, said body having overlapped end portions, a sleeve disposed on the inner surface of the end portion of the outer disposed body end and provided with a slot intermediate the ends of the sleeve, a locking member reciprocably mounted in said sleeve, stop means projecting outwardly from said locking member intermediate its ends in said slot and cooperating with said slot to limit the downward movement of said locking member, said locking member having a pointed formation at its inner end inserted in the lower surface of said top member, and

a folded over portion at its outer and lower ends clamping the body ends together.

References Cited in the file of this patent

UNITED STATES PATENTS

370,786	Henry	Oct. 4, 1887
573,192	Worden	Dec. 15, 1896
1,196,087	Crume	Aug. 29, 1916
1,791,556	Chemidlin	Feb. 10, 1931
2,086,359	Gordon	July 6, 1937
2,327,678	Stovall	Aug. 24, 1943
2,629,874	La Maida	Mar. 3, 1953