Nov. 22, 1938. W. O. DAVIES 2,137,666

SKI TRUE

Filed Aug. 16, 1937

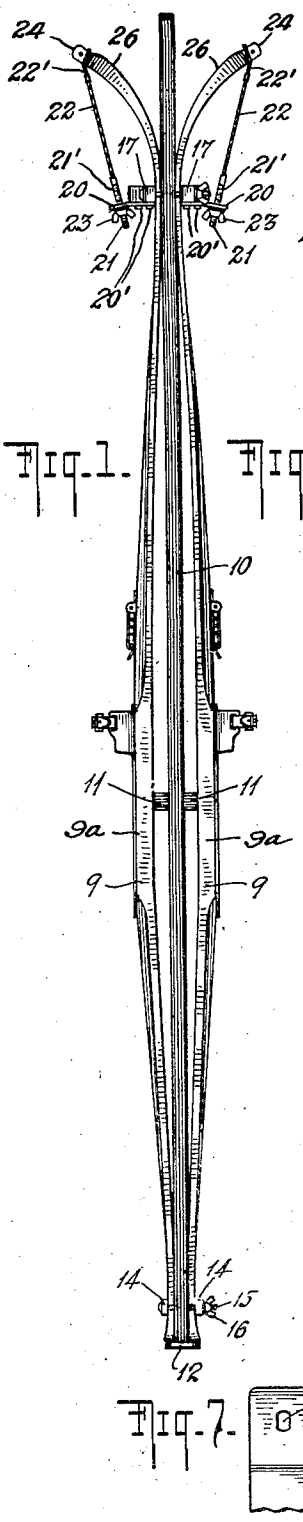


FIG. 1.

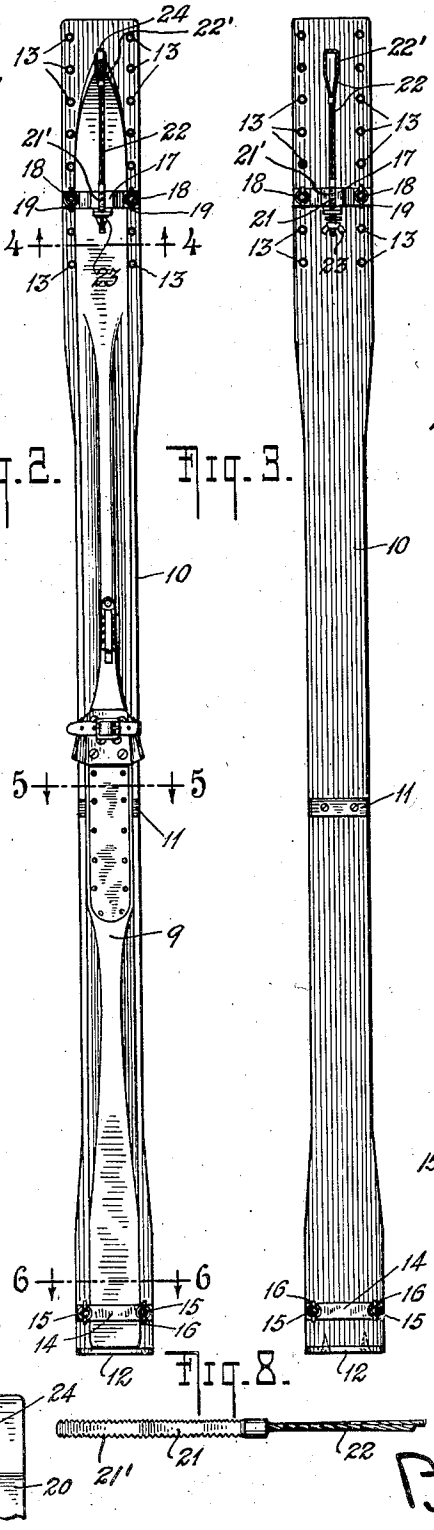


FIG. 2.

FIG. 3.

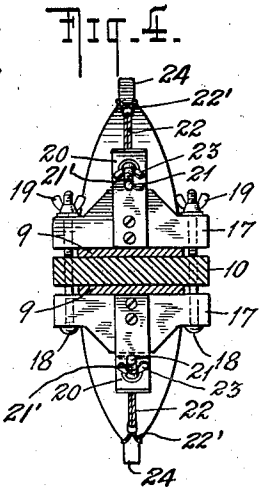


FIG. 4.

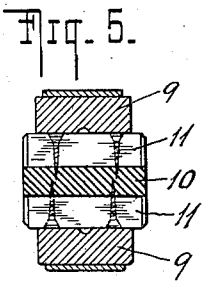


FIG. 5.

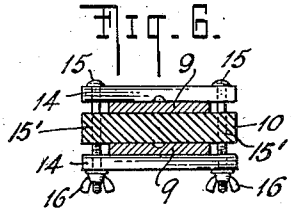


FIG. 6.

FIG. 7.

FIG. 8.

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SKI TRUE

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Application August 16, 1937, Serial No. 159,243

3 Claims. (Cl. 280—11.37)

The broad object of this invention is to provide a device for keeping skis in proper shape, and for rehabilitating skis which have warped, lost their arch or proper point curvature.

Specifically, it is intended to provide a central, flat, broad-like spine, having clamps near each end for holding a pair of skis thereto, and tensioners for drawing and holding back the points. A novel cooperation and adjustability between skis is provided by this particular arrangement.

Various means previously have been employed, such as a frame with cross pieces beneath which the fore and aft planes of a ski are bent, another cross piece beneath the arch, and a compressor for bowing the point. A ski so held, however, is free to warp, which will cause tripping on turns, and divergence on the straightaways. The prior art also shows clamps for holding two skis together at their fore and aft planes, with a block between the arches and tensioners for the points. However, since one ski always has greater rigidity than the other, the more flexible will become extremely arched, and the more rigid will tend to straighten, and both can warp. Furthermore, in such a device, the tensioners are anchored to the fore-plane clamps, and tend always to pull them forwardly.

Accordingly, another specific object is to provide anchorage in the spine for the tensioners and clamps.

A ski true made according to this invention is not only inexpensive and simple to use but is also a desirable adjunct for protecting the skis from breakage or deformation when they are stored or shipped, the assembly also being conveniently portable.

It will be seen that these and other objectives are obtained by reference to the following specification, claims and drawing in which:

Fig. 1 is a side elevation of the ski true with a pair of skis clamped thereon;

Fig. 2 is a plan view of the ski true with a pair of skis secured thereto;

Fig. 3 is a plan view similar to Fig. 2, but with the skis removed;

Fig. 4 is a cross section along the line **4—4** of Fig. 2, looking in the direction of the arrows;

Fig. 5 is similar to Fig. 4, but along the line **5—5**;

Fig. 6 is also similar to Fig. 4, but along the line **6—6**;

Fig. 7 is a detailed showing of the bracket shown in Figs. 1 through 4;

Fig. 8 is a detailed showing of the tensioner rod and cable also shown in Figs. 1 through 4.

With special reference to Figs. 1 and 2, a pair of skis **9**, **9** are shown clamped to the spine **10**, which is preferably made of wood, and slightly larger in all dimensions than the skis. Blocks **11** are secured to the spine on each side for supporting the arched portions **9a** of the skis **9**.

At the lower end of the spine **10** a resting plate **12** is provided against which the skis may conveniently abut when being clamped, the plate **12** also serving to protect the end of the spine and skis when they are propped or rested against a support. Immediately above the resting plate **12** a pair of clamps **14**, **14** are held to the spine **10** by bolts **15** and wing-nuts **16**, the bolts **15** being engaged through the spine **10** as indicated by the dotted lines **15'** in Fig. 6.

The skis **9**, **9** are held near their front ends by clamps **17**, bolts **18** and wing-nuts **19**, the bolts **17** being selectively engageable in the spine **10** through any opposed pair of holes **13**, **13** so that skis of any of the standard sizes may be held. The holes **13**, **13**, are preferably spaced according to the linear distances between various standard sizes.

The clamps **17**, **17** have brackets **20**, **20** secured thereto by means such as screws **20'**. An oblong hole **24**, as shown in Fig. 7, is provided in the bracket **20**.

The flattened rod **21** to which is fixed the cable **22**, as shown in Fig. 8, is non-rotatably engaged through the hole **24**. Wing-nuts **23**, engaged with the threads **21'** of the rod **21** are provided for drawing back the point ends **24**, **24** of the skis **9**, **9** when the loop ends **22'**, **22'** of the cables **22**, **22** are put therearound.

In operation, the lower ends of the skis **9**, **9** are slid under the clamps **14**, preferably until they abut the face-plate **12**. The wing-nuts **16** are turned to clamp the skis tightly. The upper clamps **17** are taken off; the skis are arched around the blocks **11**; and then, the upper clamps are put on and tightened by the wing-nuts **19**. The loop-ends **22'** are passed around the point ends **24**, and the wing-nuts **23** should be turned until the cables **22** are "hand tight".

The tightening of the cables **22**, **22** can be gauged so that front curves of both skis **26**, **26** are the same.

After the skis are tightly clamped to the spine, inspection might reveal that one of the skis is slightly more flexible than the other or that an unequal strain has been placed upon them in clamping. An unfailing indication of this condition is a slight bend in the spine. The remedy is executed by resting the top end of the spine

against a chair, or the like, the bottom being on the floor, with the ski most bent on top, loosening the upper clamps 17 and applying slight pressure on top of the ski which is most bent until the spine is straight. The clamps 17, 17 should then finally be tightened.

This arch adjustment has been found advantageous in truing up uneven skis, or bringing back curvatures lost in improper storage or handling.

Clearly, the fore and aft planes are kept in perfect alignment by their flat engagements with the spine on their bottoms and the clamps on their tops. It is thus impossible for either ski to warp against these compressions.

I claim:

1. A ski true comprising a spine of relatively rigid material having substantially flat opposed sides, a clamp adjustably secured to said spine near one end thereof, said clamp including two jaws and members engageable with said jaws and spine for adjustably supporting one of said jaws on each flat side of said spine, respectively, and means for drawing said jaws towards each other whereby adjustably to press each member of a pair of skis against each flat side of said spine, a second similar clamp adjustably secured near the other end of said spine, said second clamp including tensioning means engageable with the tips of a pair of skis for drawing said tips rearwardly.

2. In combination with a pair of skis, a ski true comprising a substantially flat board of relatively rigid material slightly wider, at least throughout part of the length thereof and substantially as long as one of said skis, and adapted and arranged to be clamped between said skis with their bottom surfaces pressed against the flat sides thereof, a clamp adjustably secured near one end of said board, said clamp including two cross strips, one on each side of said board, and engageable across the top sides of said skis near the rear end thereof, bolts engaged through the ends of said cross strips and transversely slidable through holes in said board near the longitudinal edges thereof, and wing-nuts on said bolts for pressing said skis inwardly against said board, a second of said clamps selectively engageable through one of a plurality of pairs of holes near the longitudinal edges of said board, said pairs of holes being arranged at intervals from the other end thereof, each cross strip on said second clamp having a plate with a hole therein for holding a turnbuckle, a cable attached to each of said turnbuckles, a loop on the free end of each cable for engaging the tips of said skis, and a block secured to each flat side of said board intermediate of said clamps for arching the central portions of said skis.

3. A ski true comprising an elongated spine of relatively rigid material, said spine having substantially flat lower and upper sides, and a pair of clamps attached thereto, said clamps being set substantially inward from the ends of said spine, at least one of said clamps including two jaws and means adjustably secured to said spine for supporting each of said jaws adjustably on each flat side of said spine, respectively, and for drawing said jaws toward said spine whereby adjustably to press each member of a pair of skis against each of said flat sides of said spine.

WILLIAM O. DAVIES.