Oct. 5, 1948. J. P. BEAUDIN 2,450,538

FOLDING SKI

Filed Oct. 19, 1946 2 Sheets-Sheet 1

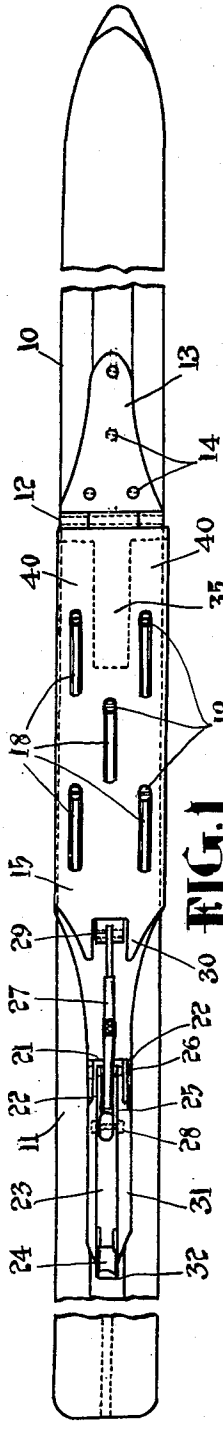

FIG. 1

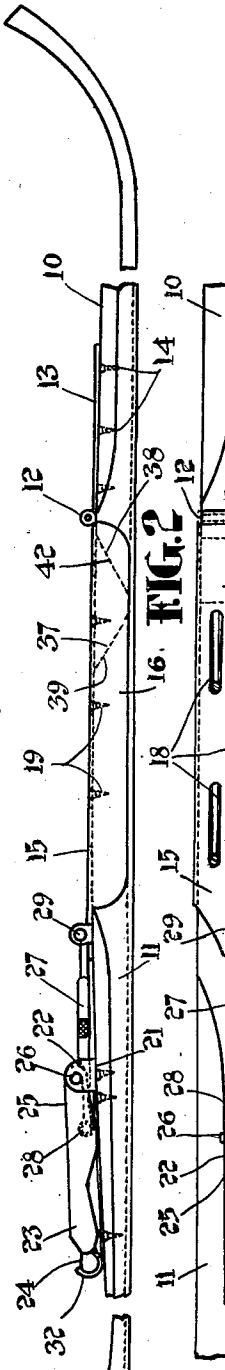

FIG. 2

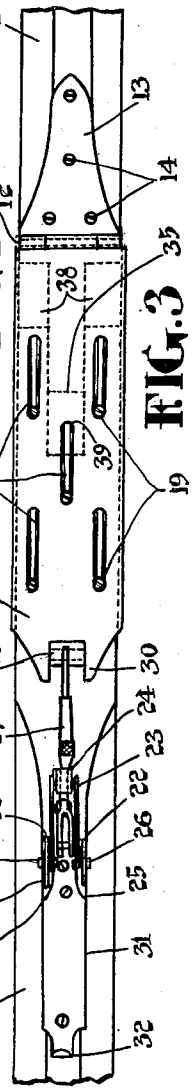

FIG. 3

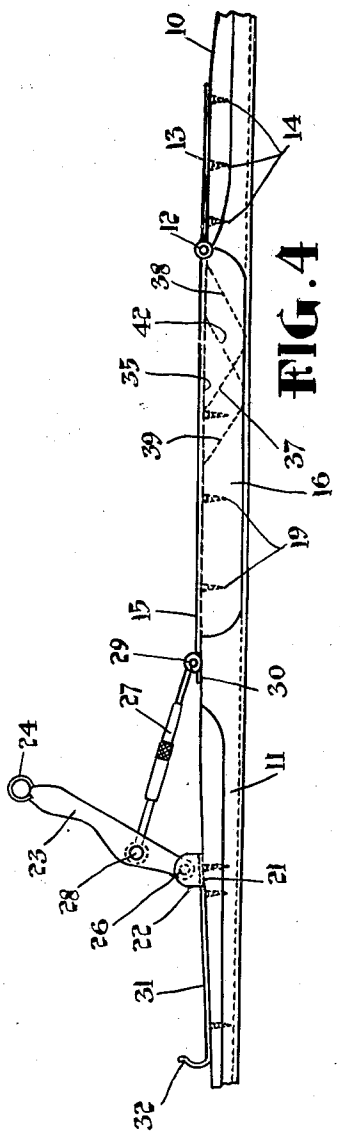

FIG. 4

INVENTOR
J. P. BEAUDIN
BY Fathiss tonhaugh & Co.
ATTORNEYS

Oct. 5, 1948. J. P. BEAUDIN 2,450,538

FOLDING SKI

Filed Oct. 19, 1946 2 Sheets-Sheet 2

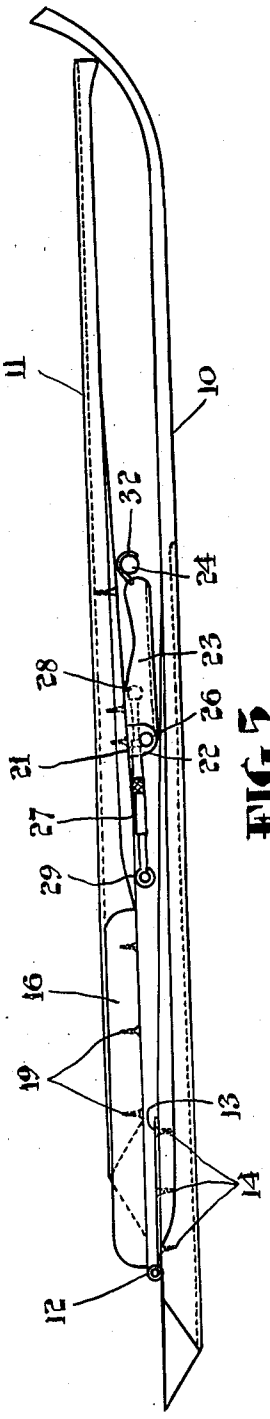

FIG. 5

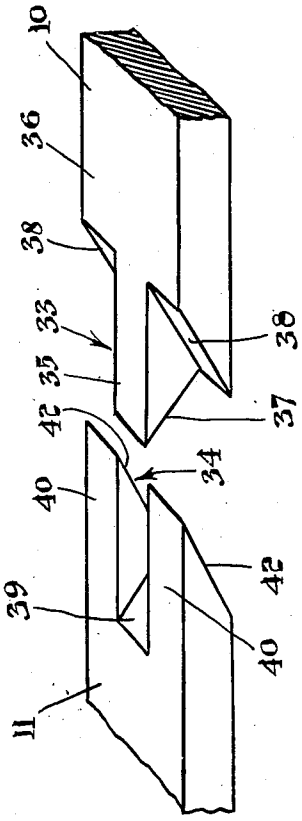

FIG. 6

INVENTOR
J. P. BEAUDIN
BY Fetherstonhaugh & Co.
ATTORNEYS

Patented Oct. 5, 1948

2,450,538

UNITED STATES PATENT OFFICE

2,450,538

FOLDING SKI

John Paul Beaudin, Montreal, Quebec, Canada

Application October 19, 1946, Serial No. 704,517

6 Claims. (Cl. 280—11.13)

1

This invention relates to folding skis comprising front and rear ski sections adapted to be slidably fitted in interlocking relation when the ski is in use and to be slidably released so that one section may be folded on the other when not in use for storage or transportation purposes.

A particular object of this invention is to provide a guide means, hingedly secured to one ski section, in which the second ski section is adapted to be moved into and out of interlocking engagement with said first section and an adjustment means, linking said second ski section to said guide means, for fitting and clamping said ski sections in interlocking relation and for releasing and sliding said sections out of engagement so that the one section may be folded on the other.

Other objects, advantages and characteristic features of the invention will be more readily understood from the following detailed description taken in connection with the accompanying drawings, in which—

Fig. 1 is a top plan view of the ski embodying my invention and showing the front and rear sections in their interlocking relation.

Fig. 2 is a side view of the ski shown in Fig. 1.

Fig. 3 is a view similar to Fig. 1, but showing the two sections disengaged.

Fig. 4 is a side view of Fig. 3.

Fig. 5 is a side view showing the front and rear ski sections in folded over relation.

Fig. 6 is a perspective view of the interlocking terminal portions of the front and rear ski sections shown in spaced relation.

Referring to the accompanying drawings, the ski consists of a front section 10 and a rear section 11 connected at their adjacent ends by a hinge 12. Hinge 12 is provided, on one side, with a hinge plate 13 fastened to ski section 10 by screws 14 and, on the other side, with a guide plate 15 to which rear ski section 11 is slidably fitted.

Guide plate 15 is channel shaped in cross-section and is arranged over rear ski section 11 with the flanges 16 straddling the side walls of said rear ski section. A plurality of longitudinally extending slots 18 are provided in the top of guide plate 15 in which lugs 19, preferably wood screws carried by rear ski section 11, are slidable for adjustment of said rear ski section into and out of engagement with front section 10.

An adjustment toggle lever mechanism is carried by rear ski section 11 and is linked to the rear end of guide plate 15 to move said rear ski section into and out of engagement with said front ski section and to clamp them securely in

2

their interlocking relation. To this end a bracket 21 having side flanges 22 is fixed to rear ski section 11 longitudinally thereof and rearward of plate 15. A lever 23 having an end finger grip 24 is connected at its other flanged end 25 to swing about said bracket flanges 22 on separate pivot pins 26. A link 27 has one end connected to an intermediate portion of lever 23 between flanges 25 to swing about a pivot pin 28. The other end of link 27 is pivotally connected to a pivot pin 29 carried by rear extensions 30 of guide plate 15. A plate 31 extending rearwardly from bracket 22 and secured to the rear ski section is provided, at its free end, with a spring clip 32 into which finger grip 24 is fastened when lever 23 is in its clamping position.

When lever handle 23 is drawn rearwardly, the fulcrum connection 28 of link 27 to lever 23 moves the rear ski section forwardly into engagement with the front ski section, the lugs 19 sliding forward in the slots 18 provided in plate 15. The handle, when pulled fully rearward, is held by spring clip 32 against accidental displacement.

In order to disengage the front and rear ski sections, lever handle 23 is pulled forward to swing about pins 26 in bracket flanges 22. The lever handle pivoting about its fulcrum connection 28 moves the rear ski section rearwardly in a sliding movement caused by the lugs 19 travelling in slots 18. When lugs 19 have travelled the full length of slots 18 the front and rear ski sections will have been completely disengaged and rear ski section 11 may then be folded about the pivotal hinge connection 12 to overlie the front ski section 10. Before the two sections have been folded in close contact with each other the lever mechanism should be moved to its clamping position so as not to interfere with the close folded relation of the two ski sections. In doing this care should be taken that the adjacent end portions of the two ski sections will not be brought into contact with one another. It is suggested, therefore, that the rear section 11 be folded about its hinge connection 12 to an angle of approximately 90° before clamping the lever mechanism in its out-of-the-way position.

The adjacent ends of the front and rear ski sections 10 and 11 are provided with tongue and groove terminals 33 and 34, respectively. Referring to tongue terminal 33 the upper surface 35 of tongue 33 is flush with the upper surface 36 of ski section 10. The lower surface 37 of tongue 33 is bevelled and, on each side of the tongue, oppositely bevelled surfaces 38 are provided. In the groove terminal 34, the groove 34 is of such

a width as to receive tongue 33 snugly and the inner terminal of the groove is bevelled, as indicated at 39, so as to be on the same plane as the lower surface 37 of tongue 33. Side portions 40, defining the groove 34, are bevelled on their lower surfaces 42. The bevelled surfaces 38 on the tongue terminal 33 lie on the same plane as the bevelled surfaces 42 of side portions 40.

It will accordingly be seen that, as the tongue terminal 33 of front ski section 10 is moved into interlocking engagement with the groove terminal 34 of rear ski section 11, the lower surface 37 of the tongue engages the upper surface 39 of the groove and thus downward movement of the tongue relative to the groove is definitely prevented. Likewise, upper bevelled surfaces 38 of the tongue terminal engage the lower bevelled surfaces 42 of groove terminal side portions 40, thus preventing downward movement of groove terminal 34 relative to tongue terminal 33. It will also be apparent that lateral movement of either terminal relative to the other is prevented due to the tongue and groove formation.

In the employment of a joint or terminal connection between the front and rear sections, I have shown complementary tongue and groove terminals for illustrative purposes. It will be understood, however, that I do not limit the scope of my invention to a single type of joint but may employ any practicable joint without departing from the spirit of the invention as defined by the appended claims.

I claim:

1. A folding ski comprising separable front and rear ski sections adapted to be slidably moved into and out of interlocking engagement, a guide plate provided with a hinge member at one end thereof which is secured to one ski section, said guide plate being adapted to embrace the second ski section in slidable engagement therewith and an adjustment means secured to the second ski section and pivotally connected to the free end of said guide plate for fitting and clamping said ski sections in interlocking relation and for releasing and slidably separating said sections so that one ski section may be folded about said hinge connection to overlie the other ski section.

2. A folding ski comprising separable front and rear ski sections adapted to be slidably moved into and out of interlocking engagement, a hinge member including a hinge plate rigidly secured to one ski section and a guide plate having one end hingedly connected to said hinge plate, said remaining ski section being slidably connected to said guide plate, and adjustment means adapted to slide said last mentioned ski section into and out of interlocking engagement with the other ski section.

3. A folding ski comprising separable front and rear ski sections, a hinge plate rigidly secured to one ski section, a guide plate slidably arranged on the second ski section and having one end hingedly connected to said hinge plate, and an adjustment lever mechanism carried by the second ski section and pivotally connected to the free end of said guide plate for slidably moving said second ski section into and out of interlocking engagement with said first ski section.

4. A folding ski as set forth in claim 3, including a plurality of lug members carried by said second ski section for slidable engagement with said guide plate.

5. A folding ski as set forth in claim 3, in which said adjustment lever mechanism is adapted to clamp said ski sections in interlocking engagement.

6. A folding ski as set forth in claim 3, in which said adjustment lever mechanism is adapted to slidably disengage said ski sections for folding one ski section about said hinge connection to overlie the other ski section.

JOHN PAUL BEAUDIN.

REFERENCES CITED

The following references are of record in the file of this patent:

FOREIGN PATENTS

Number	Country	Date
681,901	France	Feb. 4, 1930