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SUPERSTRUCTURE OF A PREFABRICATED TRACKED BRIDGE, (U)
JUN 78 A V BELOUSOV, Y L GRAUSMAN
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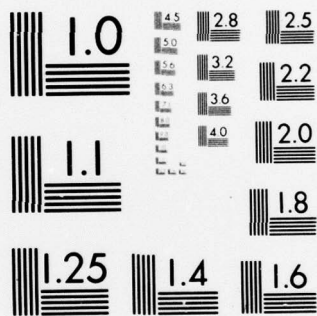
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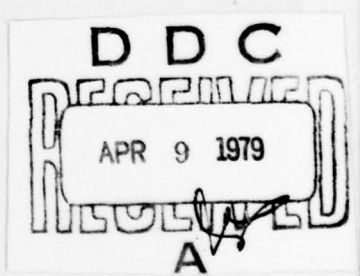


SUPERSTRUCTURE OF A PREFABRICATED TRACKED BRIDGE

By

A. V. Belousov, Yu. L. Grausman et al

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By: A. V. Belousov, Yu. L. Grausman, et al

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А а	А а	A, a	Р р	Р р	R, r
Б б	Б б	B, b	С с	С с	S, s
В в	В в	V, v	Т т	Т т	T, t
Г г	Г г	G, g	У у	У у	U, u
Д д	Д д	D, d	Ф ф	Ф ф	F, f
Е е	Е е	Ye, ye; E, e*	Х х	Х х	Kh, kh
Ж ж	Ж ж	Zh, zh	Ц ц	Ц ц	Ts, ts
З э	З э	Z, z	Ч ч	Ч ч	Ch, ch
И и	И и	I, i	Ш ш	Ш ш	Sh, sh
Й й	Й й	Y, y	Щ щ	Щ щ	Shch, shch
К к	К к	K, k	Ъ ъ	Ъ ъ	"
Л л	Л л	L, l	Ы ы	Ы ы	Y, y
М м	М м	M, m	Ь ь	Ь ь	'
Н н	Н н	N, n	Э э	Э э	E, e
О о	О о	O, o	Ю ю	Ю ю	Yu, yu
П п	П п	P, p	Я я	Я я	Ya, ya

*ye initially, after vowels, and after ъ, ь; e elsewhere.
When written as *ë* in Russian, transliterate as *yë* or *ë*.

RUSSIAN AND ENGLISH TRIGONOMETRIC FUNCTIONS

Russian	English	Russian	English	Russian	English
sin	sin	sh	sinh	arc sh	sinh ⁻¹
cos	cos	ch	cosh	arc ch	cosh ⁻¹
tg	tan	th	tanh	arc th	tanh ⁻¹
ctg	cot	cth	coth	arc cth	coth ⁻¹
sec	sec	sch	sech	arc sch	sech ⁻¹
cosec	csc	csch	csch	arc csch	csch ⁻¹

Russian	English
rot	curl
lg	log

SUPERSTRUCTURE OF A PREFABRICATED TRACKED BRIDGE

A. V. Belousov, Yu. L. Grausman,
A. S. Kriksunov, V. V. Timofeyev,
I. A. Chechin, and A. M. Sherstennikov.

This invention pertains to bridge-building.

There is a known superstructure of a prefabricated bridge which includes treads which are joined to one another by horizontal spacers.

The drawback of this superstructure is that the treads cannot be displaced mutually along the vertical.

The purpose of this invention is to provide a possibility of mutual displacement of the treads along the vertical.

For this the spacers are made telescopic and are hinge-connected to the treads by means of shoes which have a trapezoidal longitudinal cross section and which are connected to the torsion bars which are twisted, beforehand, in opposite directions.

Figure 1 shows the proposed bridge superstructure; Fig. 2 shows the same, cross section along A-A and B-B in Fig. 1; Fig. 3 shows the same, junction 1 in Fig. 1.

The bridge superstructure includes treads 1 and horizontal spacers 2. The horizontal spacers are assembled between the treads of the superstructure in two cross sections along the length of the span. The upper spacer is in the form of a tube in the middle section, whose ends enter shoes 3, which have a trapezoidal longitudinal section in the planform and which are hinge-connected with

their broad side to the junctions on the inner walls of the treads of the superstructure by means of lugs 4. This makes it possible for the tread to move vertically without allowing a longitudinal displacement. Furthermore, the spacer has the capability for a certain amount of twisting in the shoes, depending on the conditions of resting of the ends of the treads on the ground and also it allows the displacement of the tread along the width when necessary. The lower spacer 5 has a telescopic construction and is of the same length as the upper spacer, forming a hinged rectangle, as a result of which, with the mutual displacement of the treads along the vertical their surfaces remain parallel to one another. In order to straighten the treads, torsion bars 6, which are twisted beforehand in the opposite directions, are mounted along the axes of the shoe lugs of the upper spacers connected to them. Stops 7 are provided for fixing the position of the upper spacer relative to the shoes. If the construction of a bridgelayer requires that the distance between the treads be strictly adhered to, for example with a telescopic system of bridging, additional spacers 8 can be attached to the ends of the treads. This is necessary especially with a folding superstructure, due to the clearances in the middle joints 9 the distance between the treads at their ends can vary. Furthermore, when necessary, the length of the spacers can be regulated. The approximate calculations have shown that the proposed construction of the inter-tread connections provides for the entering of the superstructure into the shape of the banks.

Object of the invention

The superstructure of the prefabricated tracked bridge, which includes treads connected by horizontal spacers to one another, is distinguished by the fact that, in order to provide the possibility of mutual displacement of the treads along the vertical, the spacers have a telescopic construction and are hinged to the treads by means of shoes which have a trapezoidal longitudinal cross section and which are joined with torsion bars which are pretwisted in the opposite directions.

Fig. 1.

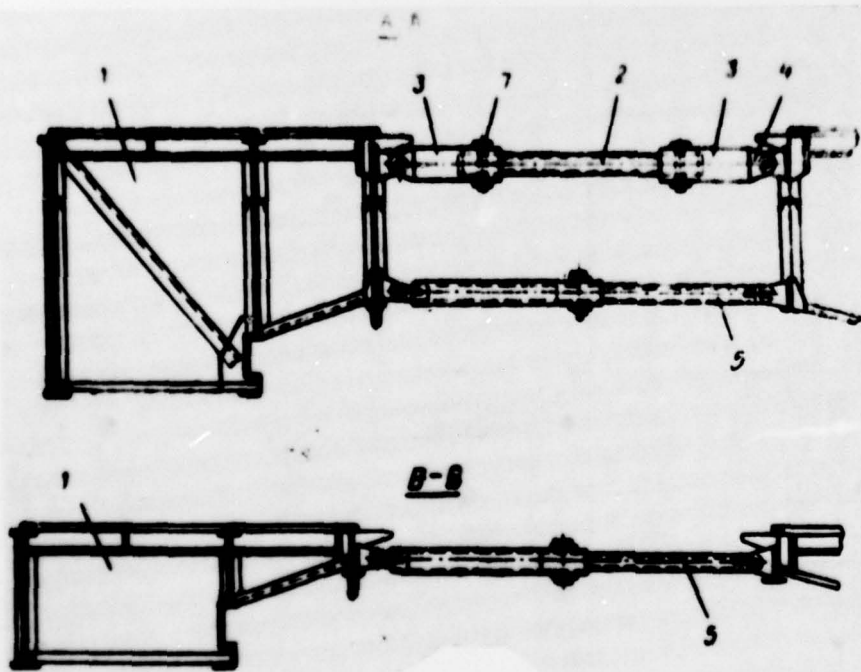
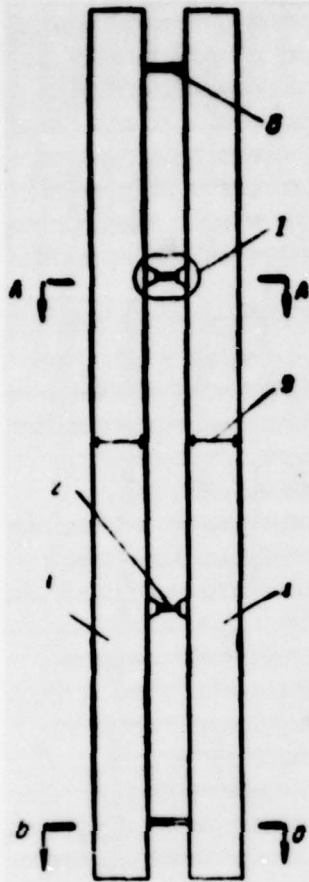


Fig. 2.

Junction 1

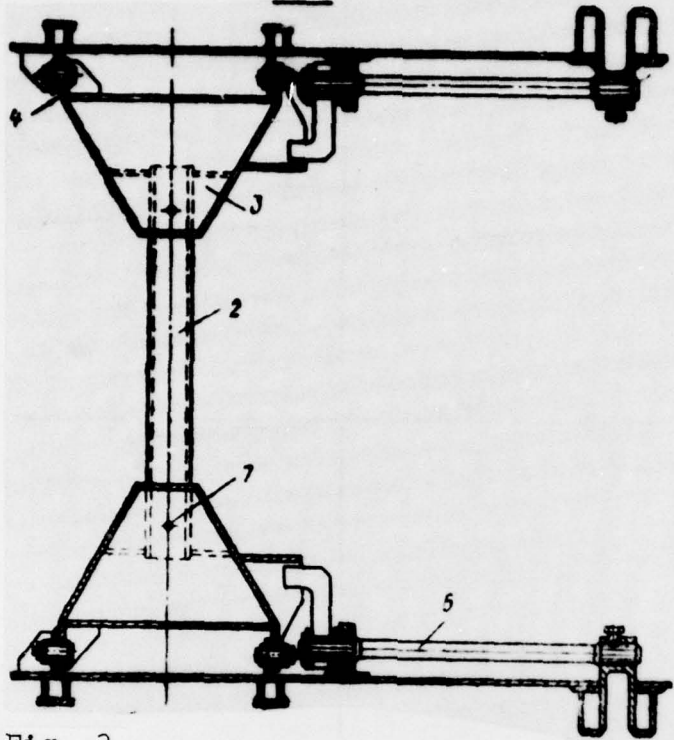


Fig. 3.

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