

COMMISSIONER'S DECISION

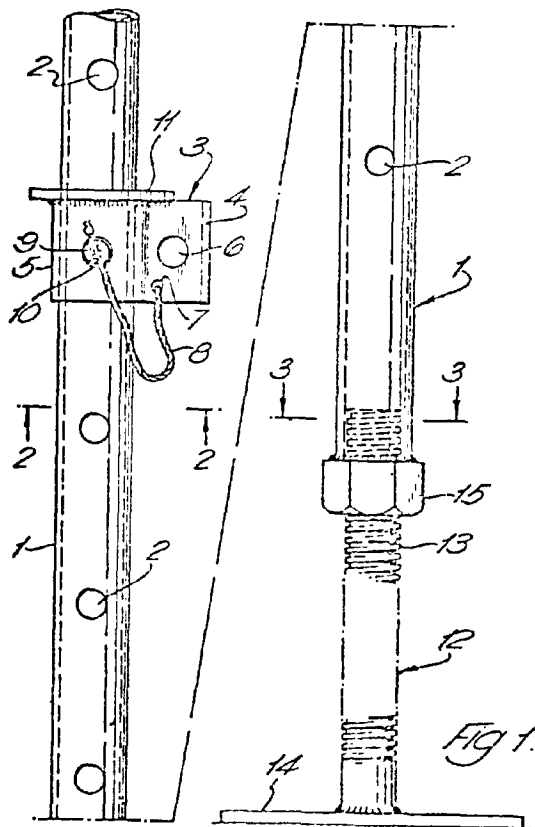
Obviousness - Improvements in Scaffolding

The scaffolding comprises upright supports, longitudinally extending bearers or ledgers and transversely extending bearers or transoms, all of which are connected together to form a rigid structure. A proposed amendment to claim 1 was accepted by the applicant.

Final Action - Affirmed - modification accepted

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated July 14, 1977, on application 206,165 (class 304-15), and is entitled "Improvements in or Relating to Builders Scaffolding."

The application relates to builders scaffolding of the kind comprising upright supports, longitudinally extending bearers or ledgers and transversely extending bearers or transoms, all of which are connected together to form a rigid structure. Figure 1, shown below, is directed to one aspect of the invention:



In the Final Action the examiner rejected the claim in view of the following

Canadian patents:

Canadian Patents

442,184	June 17, 1947	Vocisano
442,715	July 8, 1947	Alderfer
615,841	Mar. 27, 1957	Russell
722,066	Nov. 23, 1965	Alziari
763,839	July 25, 1967	Squire

The patent to Russell discloses a telescopic jack post. Squire shows a base jack for a scaffold. Alziari shows a sleeve mounted on a vertical form support post. The patents to Alderfer and Vocisano show additional examples of telescoping jack posts having both discrete and continuous adjustments.

In the Final Action the examiner had, inter alia, this to say:

...

In the patent to Squire a base jack for a scaffold is combined with discrete pin-in-hole adjustment. True, as applicant states the tubular members cannot be rotated under load in the patent to Squire however this patent states:

Screw jacks 18 are provided at the bottom of the base frames 14-15 for levelling of the frames and the shoring scaffold while screw jacks 19 are provided at the top of the extension frames 16-17 for fine adjustment of the head of the shoring scaffold.

Whether the load supporting nut 77 is rotated as in the patent to Squire or whether the tubing itself is rotated as in the present application is not considered a patentable distinction. The patent to Squire also shows through holes 29 for adjustable reception of extension legs 36-27.

The patent to Alziari shows in figures 1 and 2 a sleeve mounted on a vertical form support post by a pin-in-hole attachment. A screw jack is mounted on the sleeve for continuous adjustment. Applicant states in his reply that his support bracket of metal strip can be manufactured as a pressing which is relatively inexpensive and which does not require threading. However, whether the screw thread is at one end of the tube as in the present application, or a threaded bracket as in the patent to Alziari is not considered a patentable distinction. Screw threading is required at some point to produce the obvious result. The limiting factor, when considering the strength of the pin to support the load of the scaffold is considered to be shear strength, not bending moment as stated in applicant's disclosure.

The patents to Alderfer and Vocisano show additional examples of telescoping jack posts having both discrete and continuous adjustment. Applicant states that these references are totally irrelevant, however, the present disclosure states that:

"Furthermore, again without modification, the jack could be applied to a prop."

Thus the two situations are closely related in the present application. They are also common knowledge in the prior art and presented in numerous references.

All claims are therefore again rejected as directed to subject matter entirely obvious in view of the prior art. In addition, nothing in applicant's disclosure is seen that would require the exercise of inventive ingenuity.

...

In response to the Final Action the agent present his position (in part):

...

The present invention relates to a base jack for the tubular standards of a scaffold structure, which jack, in comparison to the cited references, provides, inter alia, the following novel and important advantages:

- a) The present base jack enables both coarse and fine vertical adjustment by means solely of the base jack itself;
- b) The present base jack enables such coarse and fine adjustment in a scaffolding comprising tubular stands which are not in any way modified for use with the base jack and which are all of the same diameter; and
- c) By employing a bracket slidable along a tube for supporting the lower most end of the standard, such end can be supported at any of a plurality of positions distributed along substantially the entire length of the tube. Consequently, the standard can, when required, be supported at a considerably lower position than would be possible with a jack employing two tubes telescopically displaceable for coarse adjustment, as discussed in greater detail below.

It is emphasized that not a single one of the cited references provides a single one of these three advantages.

Moreover, as will be more readily apparent from the following discussion, these three advantages are not the only advantages of the present invention.

With respect to the Russell reference, which relates to a telescopic jack post and not to a base jack, the Examiner has commented that the combination of screw and pin-in-hole adjustment is old and well known in many and diverse situations, the cited references being examples.

However, it does not follow from this that it would be obvious to the man skilled in the art that it would be possible, or even desirable, that the Russell jack post could be modified to provide the present invention.

In fact, neither the Russell patent nor any of the other cited references even anticipates the basic concept of combining screw and pin-in-hole adjustment in the base jack. Whether or not it would be difficult for the man skilled in the art to implement this combination in a practical manner after the basic concept has been conceived in no way detracts from the inventive merit of the concept itself....

...

Consequently, to arrive at the present invention from the Russell reference, it is necessary to conceive the following modifications of the Russell jack post:-

Firstly, it is necessary to conceive the concept of a base jack enabling both coarse and fine adjustment which can be inserted into the lower end of a tubular standard.

Secondly, it is necessary to realize that the jack post taught by Russell can be changed into a base jack by turning it upside down.

Thirdly, it is necessary to abandon the concept of two telescopically adjustable tubes, as taught by Russell, and instead adopt the concept of a single post with means for adjustably supporting the standard on such single post.

Fourthly, it is necessary to abandon Russell's teachings of a collar I having reverse annular cups, which is an essential feature of claim 1 of the Russell patent, and to substitute therefor a bracket.

It is respectfully but emphatically submitted that such numerous and extensive modifications, which would leave very little remaining of the teachings of the Russell patent, would not be obvious to a man skilled in the art without hindsight knowledge of the present invention.

...

On March 7, 1978 the examiner referred this application to the Board and stated that in view of "persuasive arguments" he was willing to allow the claims providing the subject matter of claim 3 was combined with that of claim 1.

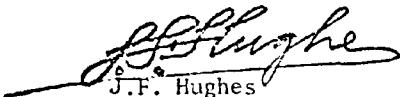
We carefully reviewed the prosecution of the application and decided that such an amendment would, in our view, place the claims in allowable form. Accordingly, we notified the agent Mr. Brian Long. He in turn, on March 13, 1978, submitted a counter proposed amendment to the Board where claims 1 and 3 were amended to read:

1. A base jack for the tubular standards of a scaffold structure which comprises a tube having a plurality of spaced pairs of transverse holes, a support bracket slidable lengthwise of said tube and having a single pair of transverse holes arranged to coincide with any one of said pairs of holes in said tube, said support bracket comprising a metal strip which is shaped to present a box-like projection, the free ends of said strip being of arcuate formation to closely fit round said tube, a locking pin provided to extend through the coincident holes in said bracket and said tube to selectively position said bracket on said tube, and a base plate supporting a screw threaded rod which is in threaded engagement with a screw thread at one end of said tube, the other end of said tube being adapted telescopically to fit into one end of a tubular standard, wherein the support bracket is in direct sliding engagement with the tube, said support bracket having means at the uppermost edge of the bracket to provide a bearing surface for said one end of the tubular standard.

3. A base jack as claimed in claim 2, in which the means for providing a bearing surface on the bracket comprise an annular plate secured to said uppermost edge.

We reviewed the proposed amendments to claims 1 and 3 and accepted them after one additional restriction "... annular bearing" was added to claim 1. The applicant submitted the appropriate amendment on March 15, 1978. On April 3, 1978 the applicant submitted a further amendment cancelling claim 6. Claims 1 to 5 are now in the application.

In the circumstances we find it unnecessary to comment further because the amendments made and the arguments presented overcome the rejection in the Final Action. We recommend that the amendments to claims 1 and 3 be accepted.



J.F. Hughes
Assistant Chairman
Patent Appeal Board, Canada

I have reviewed the prosecution of this application and agree with the recommendations of the Patent Appeal Board. Accordingly, I accept the claims presently on file in this application. This application is returned to the examiner for resumption of prosecution.



J.H.A. Gariepy
Commissioner of Patents

Agent for Applicant

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Dated at Hull, Quebec
this 13th. day of April, 1978