



00:01:54,560 --> 00:01:56,560

No, no, no. I'm dressed as Indiana Jones.

8

00:01:56,560 --> 00:01:59,560

That's him, Dr. Jones, from Indiana.

9

00:01:59,560 --> 00:02:02,560

Anyway, what's the story?

10

00:02:02,560 --> 00:02:04,560

Okay, the story is there's also a movie called

11

00:02:04,560 --> 00:02:07,560

Raiders the Lost Ark starring a guy named Indiana Jones,

12

00:02:07,560 --> 00:02:09,560

and we're going to tackle some myths from that movie.

13

00:02:09,560 --> 00:02:12,560

First and foremost, his famous sidearm, the whip.

14

00:02:12,560 --> 00:02:14,560

We're going to look at some of the science of Indy's whip

15

00:02:14,560 --> 00:02:17,560

and some of the remarkable things he does with it.

16

00:02:17,560 --> 00:02:20,560

But the opening sequence of Raiders is where we're beginning.

17

00:02:20,560 --> 00:02:22,560

Indy is escaping from a South American temple

18

00:02:22,560 --> 00:02:25,560

that is attempting to kill him with all manner of booby traps,

19

00:02:25,560 --> 00:02:27,560

including our first test,

20

00:02:27,560 --> 00:02:31,560

a floor filled with pressure pads that shoots poison darts at Indy.

21

00:02:31,560 --> 00:02:34,560

Well, sounds like fun. Let's get into it.

22

00:02:34,560 --> 00:02:35,560

Okay.

23

00:02:35,560 --> 00:02:39,560

In the exhilarating opening scene from the iconic 80s adventure story,

24

00:02:39,560 --> 00:02:42,560

there's a question to be answered.

25

00:02:42,560 --> 00:02:46,560

By simply running for it, would Indy really have escaped unharmed?

26

00:02:46,560 --> 00:02:56,560

And as a massive fan of the franchise, Adams is in his element.

27

00:02:56,560 --> 00:02:58,560

We're going to do this temple run and really figure out

28

00:02:58,560 --> 00:03:00,560

if we truly can outrun the darts,

29

00:03:00,560 --> 00:03:04,560

we're going to need to know how long that run is going to be.

30

00:03:04,560 --> 00:03:08,560

So I'm going to look at some video, do some measurements,

31

00:03:08,560 --> 00:03:15,560

and actually work it up in a little diorama for little Indy Adam here.

32

00:03:15,560 --> 00:03:20,560

You can't tell, but it's totally psyched about it.

33

00:03:20,560 --> 00:03:27,560

This kind of work is something I used to do all the time in the film industry.

34

00:03:27,560 --> 00:03:29,560

It's all coming together.

35

00:03:29,560 --> 00:03:33,560

In the film industry, it's often used as a pre-visualization technique.

36

00:03:33,560 --> 00:03:38,560

Now, just having fun.

37

00:03:38,560 --> 00:03:42,560

Like, I will mock up a set in foam core just so I understand all of its dimensions

38

00:03:42,560 --> 00:03:45,560

before building it in the actual material that will be built in.

39

00:03:45,560 --> 00:03:48,560

Hot glue threads on my face.

40

00:03:48,560 --> 00:03:52,560

Seeing something in that white space, for some reason to me,

41

00:03:52,560 --> 00:03:55,560

it's deeply, deeply satisfying.

42

00:03:55,560 --> 00:03:58,560

I put my head down and I can see what it looks like from different angles.

43

00:03:58,560 --> 00:04:01,560

It's like I'm building a playground for my brain.

44

00:04:01,560 --> 00:04:03,560

I've actually also learned a few things.

45

00:04:03,560 --> 00:04:07,560

I've carefully checked screenshots of Harrison Ford against many parts of the set,

46

00:04:07,560 --> 00:04:09,560

knowing how tall he is.

47

00:04:09,560 --> 00:04:12,560

I've determined that dart pads are about 40 inches long,

48

00:04:12,560 --> 00:04:15,560

and that that room is about 30 feet long.

49

00:04:15,560 --> 00:04:18,560

If it's 30 feet long and the dart pads are the size they are,

50

00:04:18,560 --> 00:04:23,560

Harrison Ford, Indy, will encounter at least 16 of those pads,

51

00:04:23,560 --> 00:04:25,560

likely setting off 16 darts.

52

00:04:25,560 --> 00:04:28,560

That's how many he's got to outrun.

53

00:04:28,560 --> 00:04:30,560

That's how many we're going to set up.

54

00:04:30,560 --> 00:04:34,560

Did you notice that I managed to keep the label of the pipe facing the thing?

55

00:04:34,560 --> 00:04:37,560

So you really see 450 psi.

56

00:04:37,560 --> 00:04:40,560

It's really shattering the illusion.

57

00:04:44,560 --> 00:04:48,560

In the temple run, Indy gets shot at by Mayan poison darts,

58

00:04:48,560 --> 00:04:50,560

but because these are potentially lethal,

59

00:04:50,560 --> 00:04:54,560

I'm going to do the same thing using paintballs.

60

00:04:56,560 --> 00:04:57,560

14.

61

00:04:57,560 --> 00:04:59,560

You know, I buy this crap salvaged,

62

00:04:59,560 --> 00:05:02,560

but who knew that 14 wasn't enough?

63

00:05:02,560 --> 00:05:03,560

I need 16.

64

00:05:05,560 --> 00:05:14,560

And so it's my job to figure out how to put together a 16 gun pressure pad operated paintball gun array.

65

00:05:14,560 --> 00:05:16,560

I think those will work.

66

00:05:17,560 --> 00:05:19,560

This item right here is a solenoid switch.

67

00:05:19,560 --> 00:05:25,560

The wire gives power to an electromagnet, which opens the flow of air.

68

00:05:25,560 --> 00:05:31,560

These kinds of things are how we can fire pneumatic projectiles on Q.

69

00:05:34,560 --> 00:05:35,560

It works.

70

00:05:35,560 --> 00:05:38,560

I love it when I've got all the parts I need to put together something like this.

71

00:05:38,560 --> 00:05:45,560

The sequence is going to go like a barrel connected to a pipe nipple, a solenoid,

72

00:05:45,560 --> 00:05:51,560

and that will screw into one big long tube, and that'll be our air feed.

73

00:05:51,560 --> 00:05:57,560

And so it's just going to be like a little assembly line of, you know, barrel, barrel, barrel, barrel,

74

00:05:57,560 --> 00:06:01,560

and out comes the paintball and shoots us.

75

00:06:03,560 --> 00:06:08,560

With the first of the 16 air powered guns attached to its solenoid trigger,

76

00:06:09,560 --> 00:06:11,560

it sounds kind of like a seal.

77

00:06:11,560 --> 00:06:13,560

Adam arrives to up the pressure.

78

00:06:13,560 --> 00:06:15,560

Dude, they arrived.

79

00:06:15,560 --> 00:06:16,560

Oh, cool.

80

00:06:16,560 --> 00:06:19,560

That is our pressure pad switch activation.

81

00:06:19,560 --> 00:06:21,560

Well, let's check it out.

82

00:06:21,560 --> 00:06:23,560

Point it that way.

83

00:06:23,560 --> 00:06:24,560

Pointing?

84

00:06:24,560 --> 00:06:25,560

Yeah.

85

00:06:25,560 --> 00:06:26,560

Three, two, one.

86

00:06:26,560 --> 00:06:27,560

Oh!

87

00:06:29,560 --> 00:06:31,560

That couldn't have worked any better.

88

00:06:34,560 --> 00:06:40,560

Inside this pad is an electrical switch such that when you step on it, it completes a circuit like so.

89

00:06:41,560 --> 00:06:46,560

Now that opens the flow of air and out comes the paintball and we get shot when we step on the pad.

90

00:06:47,560 --> 00:06:48,560

That is beautiful.

91

00:06:48,560 --> 00:06:49,560

There we go.

92

00:06:49,560 --> 00:06:50,560

Awesome.

93

00:06:50,560 --> 00:06:52,560

That's how each gun will be triggered.

94

00:06:52,560 --> 00:06:57,560

The next step is to combine them into a single coordinated air powered system.

95

00:06:59,560 --> 00:07:05,560

This white tube is the air supply for our paintball gauntlet, which we'll be installing in the temple.

96

00:07:05,560 --> 00:07:09,560

Now each one of these guns will be wired to its own pressure pad.

97

00:07:09,560 --> 00:07:11,560

Three, two, one.

98

00:07:11,560 --> 00:07:12,560

Whoa!

99

00:07:14,560 --> 00:07:15,560

Beautiful.

100

00:07:15,560 --> 00:07:24,560

Which as we run along, we'll be setting off these guns one after the other while we possibly are screaming in pain.

101

00:07:24,560 --> 00:07:26,560

That is going to hurt.

102

00:07:26,560 --> 00:07:30,560

Well, let's pack it up, put it on the truck and take it out to the location.

103

00:07:30,560 --> 00:07:31,560

Okay.

104

00:07:34,560 --> 00:07:44,560

Before they pack up their temple run gun, while the team gets busy prefabricating a fake man temple, Adam and Jamie get cracking.

105

00:07:45,560 --> 00:07:48,560

On another iconic Indie Inquiry.

106

00:07:48,560 --> 00:07:50,560

Well, good luck there, buddy.

107

00:07:51,560 --> 00:07:52,560

So whips.

108

00:07:52,560 --> 00:07:53,560

Exactly.

109

00:07:53,560 --> 00:07:56,560

Indie's whip is like almost mythological.

110

00:07:56,560 --> 00:08:03,560

He does all sorts of incredible stuff, including one I think we should test when he disarms an opponent with a gun using only the whip.

111

00:08:03,560 --> 00:08:09,560

So would the whip be accurate enough and would it hit the hand hard enough to knock the gun out of it or something?

112

00:08:09,560 --> 00:08:10,560

Exactly.

113

00:08:10,560 --> 00:08:15,560

I think the other thing we should look at is the opening sequence when he loops the whip around a log and swings across a chasm.

114

00:08:15,560 --> 00:08:17,560

Is that really possible?

115

00:08:17,560 --> 00:08:23,560

Yeah, I wonder whether the whip would actually have enough grip and then if it did, how are you going to get it off?

116

00:08:23,560 --> 00:08:26,560

I think we need to deeply look into the science of whips.

117

00:08:31,560 --> 00:08:36,560

If we're going to put whips through their paces in this episode, we're going to need, wait a minute, whips.

118

00:08:36,560 --> 00:08:40,560

Whip making is something I taught myself about 17 years ago.

119

00:08:40,560 --> 00:08:46,560

I built the whip I'd always wanted from Raiders of the Lost Ark and to start this episode, I'm going to build the first whip.

120

00:08:47,560 --> 00:08:49,560

This is kangaroo hide.

121

00:08:49,560 --> 00:08:51,560

Don't let anyone tell you any different.

122

00:08:51,560 --> 00:08:54,560

This is the strongest leather in the world.

123

00:08:57,560 --> 00:08:58,560

Whip making is an art.

124

00:08:58,560 --> 00:09:02,560

An art for which Adam clearly has a passion.

125

00:09:02,560 --> 00:09:09,560

Now, astonishingly, this right here is everything required to make a 8-foot leather bullet.

126

00:09:12,560 --> 00:09:14,560

Animal fat.

127

00:09:14,560 --> 00:09:18,560

But before I start, I actually need to prep the laces.

128

00:09:21,560 --> 00:09:28,560

I need to treat them with a leather dressing that softens them and allows me to stretch them to bring them out to their natural state.

129

00:09:28,560 --> 00:09:30,560

Then I'm going to braid them.

130

00:09:30,560 --> 00:09:33,560

I'm going to do a four plate braid that is using four laces.

131

00:09:33,560 --> 00:09:38,560

And this will comprise the inner and smallest core of the whip.

132

00:09:38,560 --> 00:09:40,560

This will be the center.

133

00:09:43,560 --> 00:09:45,560

Now you're starting to see where this is going.

134

00:09:45,560 --> 00:09:49,560

That is called the belly, the first belly, the interior belly of the whip.

135

00:09:49,560 --> 00:09:54,560

I'm going to cover this belly with a bolster, which is effectively a long triangle of leather.

136

00:09:54,560 --> 00:10:01,560

That bolster will then get another belly laid over it because the Indiana Jones whips are what are called two belly whips.

137

00:10:03,560 --> 00:10:07,560

The braided core and leather bolster is doubled up to form the second belly.

138

00:10:09,560 --> 00:10:14,560

And in the middle of this meticulous process, Adam couldn't be happier.

139

00:10:15,560 --> 00:10:20,560

In case you haven't guessed already, I love me the bull whips.

140

00:10:20,560 --> 00:10:22,560

I started out inspired by Raiders.

141

00:10:23,560 --> 00:10:25,560

I'm done with the second belly.

142

00:10:25,560 --> 00:10:28,560

And I quickly learned that I love two distinct things about the practice.

143

00:10:29,560 --> 00:10:33,560

These will be the 12 laces that make the actual outer coating of the whip.

144

00:10:34,560 --> 00:10:38,560

One was that I love the practice itself, the craft of whip making.

145

00:10:39,560 --> 00:10:44,560

The meticulous, repetitive, stretching, checking, cutting, lacing.

146

00:10:45,560 --> 00:10:47,560

It is deeply meditative.

147

00:10:47,560 --> 00:10:49,560

Hold on, I got to drink my own urine.

148

00:10:51,560 --> 00:10:53,560

I'm kidding, I wasn't drinking my own urine.

149

00:10:54,560 --> 00:10:55,560

I was drinking someone else's.

150

00:10:56,560 --> 00:11:02,560

The second thing I love about it is the form and function coming together magnificently.

151

00:11:02,560 --> 00:11:07,560

I mean, you've got this beautiful form of a smooth leather object that is tapered from one end to the other.

152

00:11:08,560 --> 00:11:09,560

Dude, just looking so good.

153

00:11:10,560 --> 00:11:14,560

And then that tapering turns out not just to be lovely and compelling,

154

00:11:14,560 --> 00:11:22,560

but in fact crucial for delivering the energy from your hand out to the tip of the whip with the maximum amount of strength.

155

00:11:22,560 --> 00:11:23,560

That is really cool.

156

00:11:24,560 --> 00:11:28,560

I am really pleased with how this is looking.

157

00:11:29,560 --> 00:11:32,560

For the finishing touches, Adam decorates the handle,

158

00:11:32,560 --> 00:11:34,560

and then to make the whip actually crack,

159

00:11:34,560 --> 00:11:38,560

attaches two thin strips called the fall and the cracker.

160

00:11:40,560 --> 00:11:43,560

But with all that work, pay off with a working whip.

161

00:11:44,560 --> 00:11:46,560

All right. This is very exciting.

162

00:11:49,560 --> 00:11:50,560

Oh, it sounds good.

163

00:11:53,560 --> 00:11:54,560

Yeah!

164

00:11:54,560 --> 00:11:55,560

Yeah!

165

00:12:03,560 --> 00:12:06,560

That's pretty loud. Can you hit anything with it?

166

00:12:06,560 --> 00:12:08,560

You know, I've never actually tried.

167

00:12:08,560 --> 00:12:09,560

Why don't I set something up?

168

00:12:09,560 --> 00:12:10,560

Let's do it.

169

00:12:12,560 --> 00:12:17,560

Indiana Jones nonchalantly and surgically disarmed his armed phone.

170

00:12:18,560 --> 00:12:19,560

Come on.

171

00:12:19,560 --> 00:12:20,560

Adam, however,

172

00:12:21,560 --> 00:12:25,560

can't seem to take out a few cans.

173

00:12:26,560 --> 00:12:28,560

Not exactly precision shooting.

174

00:12:30,560 --> 00:12:35,560

Until he gets real close and the laws of probability weigh in.

175

00:12:40,560 --> 00:12:41,560

Yes.

176

00:12:41,560 --> 00:12:42,560

He hit it.

177

00:12:42,560 --> 00:12:45,560

As long as I've got 10, 12, 15 tries, you are in trouble, man.

178

00:12:45,560 --> 00:12:49,560

Yep, to find out if you can indeed disarm armed adversaries,

179

00:12:51,560 --> 00:12:54,560

Adam and Jamie clearly need some expert help

180

00:12:56,560 --> 00:13:01,560

and a spectacular change of scene to set up for some temple run fun.

181

00:13:02,560 --> 00:13:03,560

Totally gonna get shot.

182

00:13:16,560 --> 00:13:21,560

Indy's whip is a character in its own right in the Raiders films.

183

00:13:22,560 --> 00:13:24,560

And it does some unbelievable things in the film.

184

00:13:24,560 --> 00:13:28,560

First and foremost, he's able to disarm someone who pulls a gun at him,

185

00:13:28,560 --> 00:13:31,560

just pull him this off his belt and giving it a crack.

186

00:13:31,560 --> 00:13:32,560

And that's what we're gonna do.

187

00:13:32,560 --> 00:13:33,560

We're gonna give that a crack.

188

00:13:34,560 --> 00:13:35,560

But there's a problem.

189

00:13:36,560 --> 00:13:38,560

Now, I'm pretty good at making these,

190

00:13:38,560 --> 00:13:41,560

but we've already established that I'm not that good at operating.

191

00:13:41,560 --> 00:13:43,560

Let's just say you're a work in progress.

192

00:13:44,560 --> 00:13:45,560

Aren't we all?

193

00:13:46,560 --> 00:13:50,560

Yep, to test Indy's mythical ability to disarm gun-coating foes,

194

00:13:52,560 --> 00:13:55,560

Adam and Jamie need a whole heap of whip-wielding tips

195

00:13:57,560 --> 00:13:59,560

from the very best in the business.

196

00:14:03,560 --> 00:14:06,560

Wherever I point the handle, I'm not gonna be able to do anything.

197

00:14:06,560 --> 00:14:07,560

I'm gonna be able to do anything.

198

00:14:10,560 --> 00:14:14,560

Wherever I point the handle, this is where the whip is gonna go.

199

00:14:15,560 --> 00:14:17,560

We brought a lot of experts onto this show over the years,

200

00:14:17,560 --> 00:14:21,560

but Anthony might be my all-time favorite right now.

201

00:14:21,560 --> 00:14:22,560

And then...

202

00:14:22,560 --> 00:14:23,560

Yes.

203

00:14:23,560 --> 00:14:24,560

Now it's just timing.

204

00:14:24,560 --> 00:14:28,560

I have rarely ever had someone teach me something so quickly.

205

00:14:30,560 --> 00:14:33,560

And I got results I really didn't think were gonna happen

206

00:14:33,560 --> 00:14:35,560

within such a short period of time.

207

00:14:35,560 --> 00:14:36,560

Straighten your arm, close your hand.

208

00:14:37,560 --> 00:14:38,560

Hey!

209

00:14:38,560 --> 00:14:39,560

Perfect.

210

00:14:39,560 --> 00:14:40,560

That totally worked!

211

00:14:40,560 --> 00:14:41,560

This is awesome.

212

00:14:41,560 --> 00:14:44,560

This is a far more precise tool than I thought it was.

213

00:14:44,560 --> 00:14:45,560

Band.

214

00:14:46,560 --> 00:14:49,560

We've got a lot of the basics of whip handling from Anthony.

215

00:14:49,560 --> 00:14:50,560

Excellent.

216

00:14:50,560 --> 00:14:53,560

But now it's time to see if we can't use the whip

217

00:14:53,560 --> 00:14:56,560

to grab a gun out of somebody's hand.

218

00:14:58,560 --> 00:15:00,560

But it's important to note that we never actually see

219

00:15:00,560 --> 00:15:02,560

how Indy disarms the bad guy.

220

00:15:02,560 --> 00:15:05,560

So to cover all our bases, we're gonna run a couple of tests.

221

00:15:05,560 --> 00:15:08,560

Stretch it out and send it out.

222

00:15:08,560 --> 00:15:09,560

Better, okay?

223

00:15:09,560 --> 00:15:13,560

First we're gonna see if that whip tip could wrap around the wrist

224

00:15:13,560 --> 00:15:17,560

and or the gun and yank it in such a way as to spoil the shot.

225

00:15:17,560 --> 00:15:20,560

We're gonna see if a direct hit to the wrist with the whip tip

226

00:15:20,560 --> 00:15:23,560

is enough to make somebody drop the gun.

227

00:15:23,560 --> 00:15:26,560

This is the scariest thing I've done all day, isn't it?

228

00:15:28,560 --> 00:15:29,560

Go ahead.

229

00:15:32,560 --> 00:15:33,560

That was perfect.

230

00:15:33,560 --> 00:15:34,560

That was a nice crack.

231

00:15:34,560 --> 00:15:35,560

It was right on the tip of your thumb.

232

00:15:35,560 --> 00:15:36,560

That would have hurt a lot.

233

00:15:36,560 --> 00:15:40,560

Jamie's making contact, but there's no mythical grab

234

00:15:40,560 --> 00:15:41,560

and aim spoiling pull.

235

00:15:41,560 --> 00:15:42,560

Go for the wrist.

236

00:15:42,560 --> 00:15:44,560

Go for the wrist, Heinemann.

237

00:15:45,560 --> 00:15:46,560

That's it!

238

00:15:48,560 --> 00:15:51,560

Not quite the first time accuracy of Indy.

239

00:15:51,560 --> 00:15:54,560

But novice Jamie is dialing in on the technique

240

00:15:54,560 --> 00:15:56,560

surprisingly quickly.

241

00:15:58,560 --> 00:15:59,560

Yes!

242

00:15:59,560 --> 00:16:00,560

Oh, there we go.

243

00:16:02,560 --> 00:16:03,560

All right, my turn.

244

00:16:09,560 --> 00:16:10,560

Did I get you?

245

00:16:10,560 --> 00:16:11,560

Yeah.

246

00:16:11,560 --> 00:16:13,560

Adam missed his target a couple of times

247

00:16:13,560 --> 00:16:15,560

and connected with me instead.

248

00:16:16,560 --> 00:16:20,560

But he was actually able to wrap the tip of the whip around my hand

249

00:16:21,560 --> 00:16:25,560

to where he would be interfering with my aiming of that gun.

250

00:16:26,560 --> 00:16:28,560

And that was actually pretty effective.

251

00:16:28,560 --> 00:16:31,560

The grab and tug is clearly plausible.

252

00:16:32,560 --> 00:16:34,560

But what about the second option?

253

00:16:34,560 --> 00:16:36,560

The hit to the hand.

254

00:16:36,560 --> 00:16:39,560

Would that force you to drop the gun?

255

00:16:41,560 --> 00:16:45,560

Well, Jamie with a short straw drawn adds extra protection

256

00:16:45,560 --> 00:16:50,560

and prepares to face the whip cracking might of the whip master.

257

00:16:52,560 --> 00:16:53,560

Ow!

258

00:16:58,560 --> 00:17:01,560

I'm positive I wouldn't have been able to hold on to that gun

259

00:17:01,560 --> 00:17:03,560

if I didn't have this glove on.

260

00:17:03,560 --> 00:17:08,560

It would be equivalent to somebody slicing at your hand with a sharp knife.

261

00:17:10,560 --> 00:17:12,560

He dropped the gun.

262

00:17:12,560 --> 00:17:17,560

Yep, without padding, Jamie's dropping the gun every single time.

263

00:17:17,560 --> 00:17:21,560

Yeah, I don't think there's any way I would have been able to hold on to this

264

00:17:21,560 --> 00:17:23,560

if I hadn't had this protection.

265

00:17:23,560 --> 00:17:26,560

So, Anthony, it strikes me that we have enough experimental evidence

266

00:17:26,560 --> 00:17:29,560

gathered thus far to conclude that the first appearance of a whip

267

00:17:29,560 --> 00:17:33,560

in Rangers of the Lost Ark is actually pretty reasonable

268

00:17:33,560 --> 00:17:37,560

that it is feasible to disarm someone with a gun if you're only holding a whip.

269

00:17:37,560 --> 00:17:38,560

Would you agree?

270

00:17:38,560 --> 00:17:39,560

I do agree.

271

00:17:39,560 --> 00:17:44,560

I think a targeted strike to bear flesh is going to make it pretty much impossible

272

00:17:44,560 --> 00:17:47,560

to hang onto the gun, let alone operate it accurately.

273

00:17:48,560 --> 00:17:50,560

So, this is plausible.

274

00:17:51,560 --> 00:17:54,560

Is that what you would do if you were in the same situation?

275

00:17:54,560 --> 00:17:55,560

Absolutely not.

276

00:17:55,560 --> 00:17:57,560

No, Wilkcape, what would you do?

277

00:17:57,560 --> 00:17:58,560

I would go straight for the face.

278

00:17:58,560 --> 00:17:59,560

Oh.

279

00:18:06,560 --> 00:18:11,560

With the gun whip myth all tied up, it's time to set the scene for the temple run.

280

00:18:11,560 --> 00:18:14,560

Not many people realize, but the Mayans built their temples just like this.

281

00:18:14,560 --> 00:18:15,560

Yeah.

282

00:18:15,560 --> 00:18:18,560

And Adams having a whole heap of fun.

283

00:18:18,560 --> 00:18:21,560

Look, I know that some of the lakes were going to seem a little bit over the top.

284

00:18:21,560 --> 00:18:24,560

Now, I'm thinking right about this level.

285

00:18:24,560 --> 00:18:25,560

Yeah, upper torso.

286

00:18:25,560 --> 00:18:26,560

Yeah.

287

00:18:26,560 --> 00:18:32,560

We could have just set up 16 paintball guns on like a wooden rack in about an hour and a half.

288

00:18:32,560 --> 00:18:35,560

But honestly, we couldn't.

289

00:18:35,560 --> 00:18:37,560

We're special effects guys.

290

00:18:37,560 --> 00:18:39,560

This is what we did for a living for decades.

291

00:18:41,560 --> 00:18:43,560

Looks pretty good.

292

00:18:43,560 --> 00:18:45,560

I know it looks like crap, but it's fun.

293

00:18:45,560 --> 00:18:51,560

It would offend our sensibilities not to make it look period and timely to the actual film we're replicating.

294

00:18:51,560 --> 00:18:58,560

Of course, any decent temple's got its share of deities and gods.

295

00:18:58,560 --> 00:19:00,560

So we've got ours.

296

00:19:00,560 --> 00:19:02,560

It would offend my sensibilities.

297

00:19:02,560 --> 00:19:08,560

Frankly, I think Jamie thinks this whole experiment isn't an excuse for me to dress up, which it might be.

298

00:19:10,560 --> 00:19:12,560

While Adam completes the scene setting,

299

00:19:13,560 --> 00:19:18,560

Jamie's connected the pressure pad and gun one for a test run.

300

00:19:18,560 --> 00:19:21,560

Three, two, one.

301

00:19:21,560 --> 00:19:26,560

Oh, that works perfectly.

302

00:19:26,560 --> 00:19:30,560

Perfectly except for a timing tweak.

303

00:19:30,560 --> 00:19:32,560

That was fantastic.

304

00:19:32,560 --> 00:19:37,560

Our Mayan temple dart room is operational except with paintballs instead of darts.

305

00:19:37,560 --> 00:19:40,560

The only thing is that hit was instantaneous.

306

00:19:40,560 --> 00:19:42,560

Cat-touch dart hit.

307

00:19:42,560 --> 00:19:45,560

And in the movie, there's actually a delay when Indie tests the rig.

308

00:19:45,560 --> 00:19:53,560

My question is how much of a time delay is there between the time that torch pushes the pad and the time the dart hits the torch?

309

00:19:53,560 --> 00:19:55,560

That's one second.

310

00:19:55,560 --> 00:19:57,560

That's going to be our delay.

311

00:19:57,560 --> 00:19:59,560

Over to Jamie.

312

00:19:59,560 --> 00:20:04,560

It's tricky, but by a few seconds, we're going to be able to get to the end of the game.

313

00:20:04,560 --> 00:20:06,560

Over to Jamie.

314

00:20:06,560 --> 00:20:12,560

It's tricky, but by inserting a timer between the pressure pad trigger and the air-powered paintball gun,

315

00:20:12,560 --> 00:20:16,560

he can delay the firing by the required one second.

316

00:20:16,560 --> 00:20:20,560

And with the guns not loaded, he steps up to test the timing.

317

00:20:27,560 --> 00:20:29,560

Who's your...we have a problem?

318

00:20:29,560 --> 00:20:34,560

That's not quite what we had in mind.

319

00:20:42,560 --> 00:20:44,560

As soon as this episode got rolling...

320

00:20:47,560 --> 00:20:49,560

That's great.

321

00:20:49,560 --> 00:20:52,560

It was clear the Mythbusters won.

322

00:20:53,560 --> 00:20:55,560

Idolize all things Indie.

323

00:20:56,560 --> 00:20:59,560

And with one myth already cracked...

324

00:21:02,560 --> 00:21:04,560

The fun is set to continue.

325

00:21:05,560 --> 00:21:07,560

Or is it?

326

00:21:07,560 --> 00:21:11,560

As it turns out, this timing setup that we put together is really screwing us up,

327

00:21:11,560 --> 00:21:16,560

because while they're delaying the firing of our valves like we want them to,

328

00:21:16,560 --> 00:21:19,560

they're also holding the valves open way too long,

329

00:21:19,560 --> 00:21:24,560

which means that by the time we get to the end of the array, our tank is empty.

330

00:21:25,560 --> 00:21:30,560

Our solution is to actually give them more air, or more of a tank.

331

00:21:30,560 --> 00:21:34,560

I'm about to build that tank out of a bunch of PVC plumbing pipe.

332

00:21:34,560 --> 00:21:37,560

You stay while Jamie plays around with the timers.

333

00:21:37,560 --> 00:21:40,560

And with the larger air supply hooked up,

334

00:21:41,560 --> 00:21:45,560

it's time for the temple run test run take two.

335

00:21:50,560 --> 00:21:52,560

That was good.

336

00:21:52,560 --> 00:21:54,560

That's exactly what we wanted.

337

00:21:54,560 --> 00:21:58,560

With the rig successfully firing on the big cylinder,

338

00:21:58,560 --> 00:22:00,560

the set dressing is complete,

339

00:22:00,560 --> 00:22:03,560

the guns armed for action,

340

00:22:03,560 --> 00:22:07,560

16 barrels, 16 paintballs.

341

00:22:09,560 --> 00:22:11,560

There we go.

342

00:22:12,560 --> 00:22:17,560

And Adams geared up, ready to run the paintball gauntlet.

343

00:22:17,560 --> 00:22:22,560

Any second now, I'm going to grab that idle and hightail it across this chamber.

344

00:22:22,560 --> 00:22:25,560

Now, if the myth is true, if the movie's version of events are correct,

345

00:22:25,560 --> 00:22:28,560

I should make it to the other side alive.

346

00:22:28,560 --> 00:22:30,560

That's what we're going to find out.

347

00:22:30,560 --> 00:22:35,560

Remember, their run has the same number of booby traps as the movie,

348

00:22:35,560 --> 00:22:38,560

and they'll shoot with the same one second delay.

349

00:22:40,560 --> 00:22:41,560

You ready?

350

00:22:41,560 --> 00:22:42,560

Yep.

351

00:22:42,560 --> 00:22:44,560

See you down the other end.

352

00:22:44,560 --> 00:22:50,560

The question is, will Adam, who'll run with the same hunched protective shuffle as Indy,

353

00:22:50,560 --> 00:22:52,560

make it out unscathed?

354

00:22:53,560 --> 00:22:59,560

Okay, in three, two, one, go.

355

00:23:03,560 --> 00:23:05,560

Something's not turned on.

356

00:23:05,560 --> 00:23:07,560

That was anti-climactic.

357

00:23:07,560 --> 00:23:10,560

Anti-climactic and a mystery.

358

00:23:10,560 --> 00:23:12,560

Three, two, one, go.

359

00:23:13,560 --> 00:23:14,560

Still no work.

360

00:23:14,560 --> 00:23:17,560

Maybe even a Mayan mystery.

361

00:23:17,560 --> 00:23:19,560

Well, I think it's clear what's going on here.

362

00:23:19,560 --> 00:23:20,560

It's this guy.

363

00:23:20,560 --> 00:23:24,560

Mythbusters is clearly suffering the idle's curse.

364

00:23:24,560 --> 00:23:29,560

The circuit's not collapsing the way it should.

365

00:23:29,560 --> 00:23:33,560

The curse may not be the same, but it's the same.

366

00:23:33,560 --> 00:23:35,560

The myth is true.

367

00:23:35,560 --> 00:23:37,560

The myth is true.

368

00:23:37,560 --> 00:23:39,560

It's collapsing the way it should.

369

00:23:41,560 --> 00:23:44,560

The curse may not be real, but ours are.

370

00:23:44,560 --> 00:23:47,560

This rig is kicking our butts.

371

00:23:47,560 --> 00:23:51,560

Hold on, I gotta take all my shit off, and we're gonna really solve this.

372

00:23:51,560 --> 00:23:54,560

Some rolled sleeves and brain storming later.

373

00:23:54,560 --> 00:23:57,560

We're only gonna pressurize it to like, what, 70?

374

00:23:57,560 --> 00:23:58,560

Yeah.

375

00:23:58,560 --> 00:23:59,560

We could try that.

376

00:23:59,560 --> 00:24:01,560

And they think they may have it sorted.

377

00:24:01,560 --> 00:24:03,560

We have figured out the problem.

378

00:24:03,560 --> 00:24:06,560

It's a simple little dumb problem.

379

00:24:06,560 --> 00:24:08,560

We just got a couple of leads misplaced,

380

00:24:08,560 --> 00:24:12,560

and we should be up and running, literally running in a minute.

381

00:24:12,560 --> 00:24:15,560

A minute and a test fire later.

382

00:24:17,560 --> 00:24:18,560

Oh, yeah.

383

00:24:19,560 --> 00:24:20,560

With vigor.

384

00:24:20,560 --> 00:24:24,560

The curse of the crossed wires is lifted.

385

00:24:24,560 --> 00:24:25,560

All right.

386

00:24:25,560 --> 00:24:27,560

And the temple run is ready to rock.

387

00:24:27,560 --> 00:24:31,560

Three, two, one, go.

388

00:24:36,560 --> 00:24:41,560

I didn't feel a thing.

389

00:24:41,560 --> 00:24:44,560

I don't think I got hit.

390

00:24:44,560 --> 00:24:46,560

You were a mile ahead of me.

391

00:24:46,560 --> 00:24:47,560

Really?

392

00:24:47,560 --> 00:24:50,560

With a one-second delay, you were halfway across the thing

393

00:24:50,560 --> 00:24:52,560

before they started the fire.

394

00:24:52,560 --> 00:24:54,560

Fantastic.

395

00:24:54,560 --> 00:24:56,560

So Indy really could have made it out.

396

00:24:56,560 --> 00:24:57,560

Easily.

397

00:25:06,560 --> 00:25:09,560

We had all the parameters we needed from the setup of the temple

398

00:25:09,560 --> 00:25:12,560

in the film, and we applied them to our set

399

00:25:12,560 --> 00:25:15,560

and discovered that Indy would indeed have made it out alive

400

00:25:15,560 --> 00:25:18,560

with his idol, wouldn't he?

401

00:25:18,560 --> 00:25:21,560

But now, let's assume the Mayans could make darts

402

00:25:21,560 --> 00:25:25,560

that shot almost instantaneously as Indy ran.

403

00:25:25,560 --> 00:25:28,560

I'll see whether he gets shot or not now.

404

00:25:28,560 --> 00:25:29,560

Here we go.

405

00:25:29,560 --> 00:25:32,560

And frankly, I pretty much expect to get shot at this point.

406

00:25:32,560 --> 00:25:34,560

Tell him to get shot.

407

00:25:34,560 --> 00:25:41,560

Instantaneous firing in three, two, one, go.

408

00:26:05,560 --> 00:26:09,560

I totally got hit.

409

00:26:09,560 --> 00:26:11,560

I got one in my back.

410

00:26:11,560 --> 00:26:13,560

That's the only one I see on you.

411

00:26:13,560 --> 00:26:14,560

Really?

412

00:26:14,560 --> 00:26:15,560

Yeah.

413

00:26:15,560 --> 00:26:19,560

As I expected when we sent the darts to instantaneous,

414

00:26:19,560 --> 00:26:21,560

I got shot and I'm dead.

415

00:26:21,560 --> 00:26:23,560

It's a poison dart after all.

416

00:26:23,560 --> 00:26:26,560

What I didn't expect is that I only got shot once.

417

00:26:26,560 --> 00:26:29,560

So as far as I'm concerned, if you ever find yourself looting

418

00:26:29,560 --> 00:26:32,560

a piece of precious Mayan gold from a temple,

419

00:26:32,560 --> 00:26:36,560

while you're probably going to die, I say run for your life.

420

00:26:40,560 --> 00:26:43,560

So why do you think the Mayans set such a long delay

421

00:26:43,560 --> 00:26:45,560

on their dart mechanism?

422

00:26:45,560 --> 00:26:47,560

Well, it is an ancient temple.

423

00:26:47,560 --> 00:26:49,560

Maybe the machinery was getting kind of rusty.

424

00:26:49,560 --> 00:26:51,560

That's a good idea.

425

00:26:51,560 --> 00:26:52,560

So how do you want to call it?

426

00:26:52,560 --> 00:26:54,560

Confirmed, I guess.

427

00:26:54,560 --> 00:26:56,560

I'm there with you, but it is a fictional universe.

428

00:26:56,560 --> 00:26:58,560

So I'm inclined to give them plausible.

429

00:26:58,560 --> 00:26:59,560

Suit's me.

430

00:26:59,560 --> 00:27:00,560

Okay.

431

00:27:02,560 --> 00:27:03,560

Okay.

432

00:27:32,560 --> 00:27:34,560

So what is this supposed to break the speed of sound?

433

00:27:34,560 --> 00:27:36,560

Is this really true?

434

00:27:36,560 --> 00:27:39,560

Is there enough of a kinetic energy transfer from the handle

435

00:27:39,560 --> 00:27:40,560

out to the end?

436

00:27:40,560 --> 00:27:42,560

That's what we were about to test.

437

00:27:42,560 --> 00:27:43,560

All right.

438

00:27:43,560 --> 00:27:46,560

Using our high-speed camera and all of the stagecraft

439

00:27:46,560 --> 00:27:48,560

we've learned in ten years of doing this show,

440

00:27:48,560 --> 00:27:50,560

we're going to try and prove that the end of the whip

441

00:27:50,560 --> 00:27:52,560

breaks the speed of sound.

442

00:27:52,560 --> 00:27:55,560

Three, two, one.

443

00:27:58,560 --> 00:28:01,560

Because the tip of the whip is moving so fast

444

00:28:01,560 --> 00:28:04,560

in the large area, it makes it really difficult to see

445

00:28:04,560 --> 00:28:07,560

where and when it's making the crack.

446

00:28:10,560 --> 00:28:15,560

Yeah, the tip's starting to swing around at about 4D.

447

00:28:17,560 --> 00:28:20,560

So with that in mind, we've created this background

448

00:28:20,560 --> 00:28:22,560

with a grid on it.

449

00:28:22,560 --> 00:28:25,560

Yeah, right about there, a little bit below it.

450

00:28:25,560 --> 00:28:29,560

So we can hopefully zoom in on it with the high-speed camera.

451

00:28:31,560 --> 00:28:34,560

Oh, it's banged right on the same mark.

452

00:28:34,560 --> 00:28:38,560

But with the camera recording at the 6,000 frames per second

453

00:28:38,560 --> 00:28:41,560

required to measure the speed of sound,

454

00:28:41,560 --> 00:28:45,560

zooming in and capturing the exact moment of the crack

455

00:28:45,560 --> 00:28:47,560

is a very tricky task.

456

00:28:48,560 --> 00:28:49,560

Okay, are you ready?

457

00:28:49,560 --> 00:28:50,560

Yeah.

458

00:28:50,560 --> 00:28:52,560

Okay, here we go.

459

00:28:57,560 --> 00:28:59,560

Two left.

460

00:28:59,560 --> 00:29:01,560

Try that.

461

00:29:05,560 --> 00:29:09,560

In terms of time, this is like looking for a needle in a haystack.

462

00:29:09,560 --> 00:29:14,560

There's a lot of increments when you're looking at 6,000 frames per second

463

00:29:14,560 --> 00:29:18,560

to find the exact instant that that passes through the frame.

464

00:29:18,560 --> 00:29:21,560

Yep, not only does Adam have to get a clean crack,

465

00:29:21,560 --> 00:29:23,560

that was too low,

466

00:29:23,560 --> 00:29:28,560

and pull off the unlikely feat of hitting the exact same mark

467

00:29:29,560 --> 00:29:34,560

the guys then have to find those four or five frames of action.

468

00:29:35,560 --> 00:29:38,560

So the signal you're watching me on right now

469

00:29:38,560 --> 00:29:42,560

is transmitting 29.9 something frames per second.

470

00:29:43,560 --> 00:29:44,560

Hello.

471

00:29:44,560 --> 00:29:48,560

I'm aiming at the same spot every single time.

472

00:29:48,560 --> 00:29:52,560

Our high-speed camera is catching almost two seconds of footage

473

00:29:52,560 --> 00:29:54,560

at 6,000 frames per second.

474

00:29:55,560 --> 00:29:57,560

That's gonna be too high.

475

00:29:58,560 --> 00:30:01,560

It is a little bit of a hunting pack.

476

00:30:10,560 --> 00:30:11,560

There it is.

477

00:30:13,560 --> 00:30:18,560

Finally, in glorious 6,000 frames per second high-speed,

478

00:30:18,560 --> 00:30:22,560

now how fast is it going right here?

479

00:30:23,560 --> 00:30:25,560

That's five frames to travel 12 inches.

480

00:30:27,560 --> 00:30:29,560

That's a lot of footage.

481

00:30:34,560 --> 00:30:36,560

1,200 feet per second.

482

00:30:36,560 --> 00:30:38,560

That beats the speed of sound.

483

00:30:38,560 --> 00:30:39,560

That is awesome!

484

00:30:39,560 --> 00:30:42,560

We caught the speed of sound being broken

485

00:30:43,560 --> 00:30:45,560

by these little fuzzies.

486

00:30:45,560 --> 00:30:47,560

That is so cool.

487

00:30:50,560 --> 00:30:55,560

It took hours of Adam whipping for us to finally capture that tiny piece of string

488

00:30:55,560 --> 00:30:59,560

traveling over the speed of sound in front of this grid.

489

00:30:59,560 --> 00:31:02,560

But we finally cracked it, so to speak.

490

00:31:06,560 --> 00:31:10,560

With the science whipped into shape, Adam and Jamie head back to the warehouse

491

00:31:10,560 --> 00:31:14,560

to test the whip's mythical ability to swing Indy to safety.

492

00:31:17,560 --> 00:31:21,560

This story has Indy swinging across a chasm on his whip.

493

00:31:22,560 --> 00:31:26,560

And since we don't happen to have a chasm ready to go,

494

00:31:26,560 --> 00:31:28,560

we decided to build our own.

495

00:31:30,560 --> 00:31:32,560

This thing weighs 5,000 pounds empty.

496

00:31:32,560 --> 00:31:34,560

You got room, you can keep coming in.

497

00:31:34,560 --> 00:31:36,560

Kill someone in a heartbeat.

498

00:31:36,560 --> 00:31:38,560

Pull, pull, pull. Yeah.

499

00:31:38,560 --> 00:31:41,560

We're using these containers, which we love.

500

00:31:41,560 --> 00:31:43,560

That's it! Perfect over here!

501

00:31:43,560 --> 00:31:44,560

Miles, pull!

502

00:31:44,560 --> 00:31:47,560

Because they're kind of like big bricks.

503

00:31:47,560 --> 00:31:49,560

Yeah!

504

00:31:49,560 --> 00:31:52,560

We can build whatever we want instantly.

505

00:31:52,560 --> 00:31:54,560

They're at the needle.

506

00:31:54,560 --> 00:31:56,560

But like a 5,000 pound needle.

507

00:31:59,560 --> 00:32:04,560

Now the containers here stacked up represent exactly one half of our chasm.

508

00:32:04,560 --> 00:32:06,560

Alright, here we go.

509

00:32:06,560 --> 00:32:09,560

We're going to bring in the other pair of containers and make the other half of the chasm.

510

00:32:09,560 --> 00:32:14,560

They're going to be a certain distance apart, but how far apart is the real question?

511

00:32:14,560 --> 00:32:18,560

An answer found with a little high-speed camera magic.

512

00:32:18,560 --> 00:32:20,560

That was good.

513

00:32:20,560 --> 00:32:25,560

So we've got my jump on high speed, but how are we going to use that to determine how wide our chasm is?

514

00:32:25,560 --> 00:32:29,560

Especially since I'm jumping on flat ground and Indy was jumping across a chasm,

515

00:32:29,560 --> 00:32:31,560

which he hit the edge of with his chest.

516

00:32:31,560 --> 00:32:36,560

Editors, can you help me out please and load up the high-speed footage of my jump?

517

00:32:36,560 --> 00:32:37,560

Excellent.

518

00:32:37,560 --> 00:32:41,560

Okay, now, fast-forward until my foot leaves the starting line,

519

00:32:41,560 --> 00:32:44,560

right there and put a dot on my chest.

520

00:32:44,560 --> 00:32:45,560

Great.

521

00:32:45,560 --> 00:32:50,560

Now continue to put dots on my chest through the full arc of my jump until my left foot touches the ground.

522

00:32:50,560 --> 00:32:51,560

Excellent.

523

00:32:51,560 --> 00:33:00,560

Now, draw a line that intersects all those dots until you've got a curve and continue that curve until it hits the ground where my number stripes are.

524

00:33:00,560 --> 00:33:01,560

Perfect.

525

00:33:01,560 --> 00:33:03,560

Okay, can you count up how many number stripes those are?

526

00:33:03,560 --> 00:33:04,560

12.

527

00:33:04,560 --> 00:33:05,560

Beautiful.

528

00:33:05,560 --> 00:33:08,560

That is the distance of our chasm, 12 feet.

529

00:33:09,560 --> 00:33:14,560

With the exact distance marked off, the far side of the chasm is dropped into position.

530

00:33:16,560 --> 00:33:17,560

Nice!

531

00:33:19,560 --> 00:33:21,560

Some protective padding put in place.

532

00:33:23,560 --> 00:33:24,560

That's a long way to fall.

533

00:33:24,560 --> 00:33:27,560

The key structural component brought up...

534

00:33:27,560 --> 00:33:29,560

This is our branch.

535

00:33:31,560 --> 00:33:33,560

Some more safety measures manhandled.

536

00:33:34,560 --> 00:33:36,560

Indy never fought a beast like this.

537

00:33:36,560 --> 00:33:38,560

This is like a Dr. Who villain.

538

00:33:38,560 --> 00:33:40,560

Yeah, that's it!

539

00:33:42,560 --> 00:33:45,560

Before the movie accurate scene is set...

540

00:33:45,560 --> 00:33:47,560

Good luck there buddy.

541

00:33:47,560 --> 00:33:48,560

I'm going to stand back here.

542

00:33:48,560 --> 00:33:52,560

...for Adam's date with Whip Swinging Destiny.

543

00:33:53,560 --> 00:33:59,560

If you wondered exactly how Adam and Jamie got the ball rolling on this Indiana Jones junket, wonder no more.

544

00:33:59,560 --> 00:34:04,560

Believe it or not, this is actually going to be our spherical temple run stone.

545

00:34:04,560 --> 00:34:05,560

Rise!

546

00:34:05,560 --> 00:34:06,560

Rise!

547

00:34:06,560 --> 00:34:09,560

Ha ha ha ha ha!

548

00:34:09,560 --> 00:34:12,560

Oh hey man, you're going to be a great guy.

549

00:34:12,560 --> 00:34:14,560

I'm going to be a great guy.

550

00:34:14,560 --> 00:34:16,560

I'm going to be a great guy.

551

00:34:16,560 --> 00:34:18,560

I'm going to be a great guy.

552

00:34:19,560 --> 00:34:21,560

Ha ha ha ha ha!

553

00:34:21,560 --> 00:34:23,560

Oh hey man, check it out.

554

00:34:23,560 --> 00:34:25,560

It's our temple run ball!

555

00:34:25,560 --> 00:34:26,560

Whoa dude!

556

00:34:26,560 --> 00:34:37,560

So we've got our big clear plastic ball, but to make it look like a boulder, we have the idea that we'll take this two-part thumb and mix it together and slather it all over the surface.

557

00:34:37,560 --> 00:34:43,560

If we do it kind of sloppy but in the right way, it might just look like a big stone thing, which is what we want.

558

00:34:44,560 --> 00:34:47,560

That looks like a piece of stone.

559

00:34:49,560 --> 00:34:51,560

Inclinable stone? No problem.

560

00:34:52,560 --> 00:34:54,560

It's called safety stone.

561

00:34:54,560 --> 00:34:56,560

Ha ha ha ha ha!

562

00:35:24,560 --> 00:35:33,560

Now the next thing that we've got to do is take our whip and throw it across the tree branch and see whether it creates a knot that's strong enough to hold a person.

563

00:35:33,560 --> 00:35:35,560

Here we go.

564

00:35:35,560 --> 00:35:37,560

Because if it ain't...

565

00:35:38,560 --> 00:35:40,560

Ha ha ha ha ha!

566

00:35:40,560 --> 00:35:43,560

I've waited my whole life for this moment.

567

00:35:43,560 --> 00:35:45,560

They're falling to their death.

568

00:35:47,560 --> 00:35:49,560

But before Adam tests the strength of the swing...

569

00:35:49,560 --> 00:35:51,560

Oh! Hey!

570

00:35:51,560 --> 00:35:52,560

Wasn't bad.

571

00:35:52,560 --> 00:35:54,560

That was not bad.

572

00:35:54,560 --> 00:35:57,560

He has to actually secure the whip on the log.

573

00:35:59,560 --> 00:36:03,560

This test goes down in history as one of my all-time favorites.

574

00:36:03,560 --> 00:36:06,560

But it did not start out looking that rosy.

575

00:36:06,560 --> 00:36:07,560

Oh!

576

00:36:07,560 --> 00:36:10,560

First, just trying to wrap the whip around the log.

577

00:36:10,560 --> 00:36:14,560

I was not getting enough service area, not getting enough friction.

578

00:36:15,560 --> 00:36:18,560

I want to feel that solid bite.

579

00:36:18,560 --> 00:36:20,560

The leather on the log.

580

00:36:21,560 --> 00:36:24,560

What I really needed was a kind of a knot.

581

00:36:24,560 --> 00:36:27,560

Actually, the technical term is a half hitch.

582

00:36:27,560 --> 00:36:29,560

Oh! That looks so promising.

583

00:36:29,560 --> 00:36:30,560

You had a crossover.

584

00:36:30,560 --> 00:36:31,560

I did.

585

00:36:31,560 --> 00:36:34,560

I need a second crossover.

586

00:36:34,560 --> 00:36:39,560

But that tested my whip-wielding skills to the absolute limit.

587

00:36:42,560 --> 00:36:43,560

Dude.

588

00:36:43,560 --> 00:36:44,560

That's not bad.

589

00:36:44,560 --> 00:36:45,560

I think I got a hitch.

590

00:36:45,560 --> 00:36:47,560

Oh man.

591

00:36:47,560 --> 00:36:49,560

Well, good luck there, buddy.

592

00:36:49,560 --> 00:36:51,560

I'm going to stand back here.

593

00:36:51,560 --> 00:36:55,560

With the whip grip seemingly secure, this is it.

594

00:36:56,560 --> 00:36:57,560

This is terror.

595

00:36:57,560 --> 00:36:59,560

Actually, I'm genuinely scared.

596

00:36:59,560 --> 00:37:04,560

Was Indy's mythical swing to freedom feasible or a fictional fancy?

597

00:37:09,560 --> 00:37:10,560

Oh!

598

00:37:12,560 --> 00:37:13,560

I'm good.

599

00:37:13,560 --> 00:37:14,560

I'm good.

600

00:37:14,560 --> 00:37:15,560

I'm okay.

601

00:37:16,560 --> 00:37:18,560

So, I got the loop around the log.

602

00:37:18,560 --> 00:37:20,560

It felt really, really secure.

603

00:37:20,560 --> 00:37:22,560

I think I got a hitch.

604

00:37:22,560 --> 00:37:25,560

And then just before my feet reached the other side,

605

00:37:25,560 --> 00:37:28,560

the whip unwinds from the log and I go tunneling.

606

00:37:31,560 --> 00:37:33,560

All right, we got to try this again.

607

00:37:33,560 --> 00:37:34,560

That was too much fun.

608

00:37:36,560 --> 00:37:40,560

Even though Adam fell, I have to say, I'm surprised he did as well as he did.

609

00:37:40,560 --> 00:37:46,560

Because from this distance, you're only going to get around three wraps out of it.

610

00:37:46,560 --> 00:37:47,560

There you go.

611

00:37:47,560 --> 00:37:51,560

So, a single half-itch holding a close to 200-pound guy.

612

00:37:51,560 --> 00:37:53,560

Pretty low odds, if you ask me.

613

00:37:55,560 --> 00:37:57,560

Yeah, you're moving the whole log, dude.

614

00:37:57,560 --> 00:37:58,560

Am I?

615

00:37:58,560 --> 00:37:59,560

Yeah.

616

00:37:59,560 --> 00:38:00,560

I think you're going to do it, buddy.

617

00:38:00,560 --> 00:38:01,560

Here we go.

618

00:38:01,560 --> 00:38:02,560

Oh!

619

00:38:11,560 --> 00:38:12,560

Gah!

620

00:38:15,560 --> 00:38:17,560

I thought that was going to be mine!

621

00:38:18,560 --> 00:38:23,560

Once again, the whip and potentially the myth unravels at the last second.

622

00:38:24,560 --> 00:38:30,560

But as Edison almost said, myth-busting is 1% inspiration

623

00:38:30,560 --> 00:38:36,560

and 99% repeatedly throwing yourself into a chasm for science.

624

00:38:37,560 --> 00:38:38,560

Oh, dude!

625

00:38:38,560 --> 00:38:41,560

Well, no guts, no glory.

626

00:38:41,560 --> 00:38:42,560

No guts, no glory.

627

00:38:42,560 --> 00:38:44,560

Three, two, one.

628

00:38:45,560 --> 00:38:46,560

You're going to make it!

629

00:38:46,560 --> 00:38:47,560

Oh!

630

00:38:47,560 --> 00:38:48,560

Oh, brat!

631

00:38:49,560 --> 00:38:50,560

Gah!

632

00:38:53,560 --> 00:38:54,560

Oh!

633

00:38:55,560 --> 00:38:59,560

Three times so far, I have attempted to lasso our log with my whip

634

00:38:59,560 --> 00:39:01,560

and swing across this chasm.

635

00:39:01,560 --> 00:39:06,560

And three times, just as glory, seemed within my grasp, the whip slipped

636

00:39:06,560 --> 00:39:08,560

and I fell to my death.

637

00:39:08,560 --> 00:39:13,560

But for due diligence, we are going to cover our log with some bark-like friction material

638

00:39:13,560 --> 00:39:15,560

and give it another go.

639

00:39:15,560 --> 00:39:20,560

This sandpaper or our pseudo-bark may not seem like that much,

640

00:39:20,560 --> 00:39:24,560

but it may not actually take that much to allow the whip to bite.

641

00:39:24,560 --> 00:39:26,560

Without this, it can just slide.

642

00:39:26,560 --> 00:39:28,560

It's almost like it's lubricated.

643

00:39:28,560 --> 00:39:31,560

With this, it'll just give it a little bit of tooth

644

00:39:31,560 --> 00:39:35,560

so that those coils can actually cinch onto the log.

645

00:39:35,560 --> 00:39:36,560

All right.

646

00:39:37,560 --> 00:39:38,560

One more time?

647

00:39:38,560 --> 00:39:39,560

Go for it.

648

00:39:39,560 --> 00:39:40,560

Okay, here we go.

649

00:39:40,560 --> 00:39:44,560

So what difference will this small, real-world detail make?

650

00:39:45,560 --> 00:39:46,560

Oh!

651

00:39:47,560 --> 00:39:52,560

A first-time grip and it's looking good, but Adam's been burned before.

652

00:39:55,560 --> 00:39:58,560

As many times as I've done this, it's still scary.

653

00:39:59,560 --> 00:40:00,560

All right.

654

00:40:00,560 --> 00:40:02,560

It's now or never.

655

00:40:03,560 --> 00:40:04,560

Here we go.

656

00:40:05,560 --> 00:40:06,560

Oh!

657

00:40:07,560 --> 00:40:08,560

Yeah!

658

00:40:08,560 --> 00:40:09,560

Give me some!

659

00:40:17,560 --> 00:40:20,560

You could say Adam's happy with the result.

660

00:40:20,560 --> 00:40:21,560

Yeah!

661

00:40:27,560 --> 00:40:30,560

Not quite an indie reaction, but dude, we totally did it!

662

00:40:30,560 --> 00:40:31,560

Yeah.

663

00:40:31,560 --> 00:40:33,560

All right, throw me the idol.

664

00:40:36,560 --> 00:40:37,560

Come on.

665

00:40:41,560 --> 00:40:43,560

All the question now is, can you get it off there?

666

00:40:43,560 --> 00:40:44,560

Oh, right.

667

00:40:44,560 --> 00:40:45,560

Okay, here we go.

668

00:40:45,560 --> 00:40:46,560

Come on.

669

00:40:46,560 --> 00:40:47,560

Come on.

670

00:40:47,560 --> 00:40:50,560

So once we added a little bit of friction, some bark to our log,

671

00:40:50,560 --> 00:40:54,560

the whip grabbed easily, and I swung across handily.

672

00:40:54,560 --> 00:40:56,560

It was beautiful.

673

00:41:00,560 --> 00:41:01,560

Come on, baby.

674

00:41:01,560 --> 00:41:03,560

Come on, this is the final thing.

675

00:41:03,560 --> 00:41:05,560

Indy's whip grabs when you want it, and let's go when you want it.

676

00:41:05,560 --> 00:41:06,560

Come on.

677

00:41:06,560 --> 00:41:10,560

Now, I still don't think the whip has the kind of magical properties

678

00:41:10,560 --> 00:41:13,560

that Indy uses it as an extension of his hands.

679

00:41:13,560 --> 00:41:14,560

How does this work?

680

00:41:14,560 --> 00:41:15,560

There we go!

681

00:41:15,560 --> 00:41:16,560

Almost.

682

00:41:17,560 --> 00:41:18,560

Awesome.

683

00:41:18,560 --> 00:41:23,560

But we've pretty much proved it can do everything we've seen in the movie.

684

00:41:29,560 --> 00:41:33,560

With that, this archaeological adventure rumps to a conclusion.

685

00:41:34,560 --> 00:41:37,560

And Indy's iconic status is, quote,

686

00:41:39,560 --> 00:41:42,560

Dr. Jones was not doomed in the temple.

687

00:41:43,560 --> 00:41:44,560

Indy really could have made it out.

688

00:41:44,560 --> 00:41:45,560

Easily.

689

00:41:45,560 --> 00:41:47,560

And when it comes to a tight spot,

690

00:41:47,560 --> 00:41:48,560

You're gonna make it!

691

00:41:48,560 --> 00:41:50,560

His trusty weapon,

692

00:41:50,560 --> 00:41:51,560

I think you're gonna do it, buddy,

693

00:41:51,560 --> 00:41:54,560

is all it's cracked up to be.

694

00:41:55,560 --> 00:41:57,560

Yeah!