

ambulance that would take me to a med-evac helicopter at Mariposa. (It was too dark for the helicopter to land at Yosemite, and the initial ambulance needed to stay in the park.) My thumb also met us at the rendezvous.

The second ambulance crew made a number of calls and were told that we (my thumb and I) should be flown to Fresno where the reattachment could be attempted. But when we reached the hospital, the doctor there said they didn't do reattachments. Somehow the communications had been garbled and, needless to say, I wasn't very happy. They tried to make up for it by fast-tracking all the necessary x-rays, blood/urine tests, ECG, and other preliminaries for surgery while waiting for another helicopter to arrive. Eventually we reached San Francisco International Airport. (We couldn't land at the hospital because San Francisco is a noise-free zone, according to my flight nurse.) Another ambulance took me to the California Pacific Medical Center in San Francisco, where they specialize in reattachment surgery.

The fall occurred at about 1745 and now it was midnight. I was concerned that too much time had elapsed for reattachment, but the surgeons said if no muscle is involved, the time frame isn't as critical; however, reattachment still might not be possible. After surgery, if my thumb was wrapped completely, it was not successful. If the end was exposed with two pins sticking out, it was successful. When I awoke, I saw two pins, so I was happy. Recovery included five days confined to bed—no exceptions—while leeches drained excess blood from my thumb. The pins came out after five weeks, then I had more weeks of physical therapy, and I'm now back to climbing. The thumb still lacks some feeling and strength, but it turns out I don't need it for most moves.

Analysis

There are lots of warning about keeping your digits away from the eyes of pitons and the cables of camming devices, but I can't "finger" a culprit in this case. I remember that the pain occurred at the beginning of the fall, not the end. I was high-stepping and my left hand was holding on to something near the top of the *étrier*—probably my daisy or the little grab loop on the *etrier*, but not the cam itself, I think—while I reached high with my right hand to set the next piece. The surgeons said the tip of the thumb was pulled off, not cut off, and it's hard to see what could have grabbed it so tightly. I've thought about it a lot, but I still don't know what happened. (Source: John Robinson, Curt Taras, and John Dill, NPS Ranger)

FALL ON ROCK – BELAY FAILURE (UNSECURED ROPE, DISTRACTION)

California, Yosemite Valley, Churchbowl

On Nov. 6, Betsey (20) and I, Mike (19), (pseudonyms) spent the day climbing at Churchbowl with friends. I had climbed in the park several times over the last three years, but that was my first time at Churchbowl. I led several climbs and rigged top ropes for the others to follow, using a 60-meter rope.

About 1600, I went over to do Churchbowl Lieback (one pitch, 5.8). It was an hour or so before dark and I was trying to squeeze in some more routes. I unflaked the rope quickly, and then I called everyone over, without thinking about whether I had tied a knot at the bottom end of the rope. Another group of climbers came over to watch and to wait for their turn.

I led the pitch while Betsey belayed me from the ground. At the top I backed up the slings on the anchor tree, added 'biners for the top rope, and asked Betsey to lower me.

There is a ledge about ten feet above the ground, and when I was about three feet above it, the rope started feeding out faster and I began slipping. I didn't know what was happening and I yelled to Betsey to stop me, but the end of the rope had run through her belay device, so of course she couldn't stop me. I noticed rocks on the ground directly below and I may have pushed myself backwards off the wall in the right direction, because somehow I managed to land in the dirt next to the rocks. I hit hard on my butt and then my back, and rolled down the hill. The wind was knocked out of me and I couldn't even say "I'm OK."

A friend climbing nearby heard me hit and immediately came over, stabilized my neck, and had me lie on my back. My whole lower back hurt on both sides. Someone called 911 and the ambulance (which was at the clinic only a couple of hundred yards away) was there in minutes. At the clinic the staff checked me over head-to-toe and decided nothing was broken, so they let me go. I had minor sprains and a tiny bit of blood in my urine suggestive of a mild kidney contusion, but everything felt fine within a week. I was lucky to miss the rocks.

Analysis

Mike: I had read about the route in the past but had forgotten that our guidebook advised belaying from the ledge, not the ground. When I walked over to the route I did not even think about rope length. I'd never been on a climb where the rope was this short, and I think the reason I got used to not always tying knots is from the gym, where you are sure the rope is long enough. Also, most of my trad climbing is multi-pitch, so the second is always tied in. From now on I'll knot the end or leave it tied to the rope bag. My rope will also have a mid-mark. Finally, I normally do not wear a helmet on short climbs, but I will never not (sic) wear one again.

Betsey: I think a flaw in our climbing relationship is that Mike is more experienced and generally the leader, so he is always the one who initially checks the rigging. He'll say, "OK, we're ready to go," and I'll do a quick double-check, as he's trained me to do, and we go. We often tie a knot in the end of the rope, but this time I wasn't thinking as thoroughly and independently as I should have been, so I didn't double-check. During the climb the rope was in view, piled on the bag to my right as I faced the wall.

I'm a competent belayer, but I was looking up at Mike and chatting with the other climbers, who were to my left and a little behind me. I became distracted long enough to forget about the end of the rope. (Source: Betsey, Mike, and John Dill, NPS Ranger)

(Editor's Note: There were many more incidents in Yosemite than appear here. The good news is that there were no serious bouldering mishaps. The bad news is that there was a total of 19 leader fall accidents, 11 cases involving rappelling, belay errors, rockfall, etc. A serious rockfall—200-pound block—struck one climber on Tangerine trip in December, resulting in a two-day rescue operation. Not all of them made it into Table III because not enough details were available. Special thanks to John Dill and Jesse McGahey, Yosemite rangers, for their assiduous work in compiling and following up on incidents, including interviewing climbers involved.)

FALL ON ICE, ICE PILLAR FRACTURED

Colorado, Vail, The Fang

On January 12, MM (34) and KS partnered up to climb a 35-meter pillar of ice known as The Fang (WI5). MM instructed KS on their approach where to stand for a safe belay. MM started his lead by climbing on the opposite side of the cauliflower to the base of the pillar where he set a screw and moved to the west side of the pillar. Setting another screw, MM moved back around and back cleaned his first placement. He regained the start of his line, and continued confidently up the pillar, making a few light-hearted comments about his protection and obviously having fun. MM placed approximately six screws in the pillar. He was above his last screw by about five meters and approximately 30 meters from the ground, and after placing his feet and setting his right tool, the next swing with the left, the pillar seemingly imploded below him.

The climber's hands, as reported by a close witness, were above the fracture line and the ice seemed to fall a fraction of a second before the climber. Clouded by a plume of ice dust the rest of the fall was not witnessed. He came to rest on the viewer's right, about three meters from the formation. KS reached MM within seconds and began his rapid assessment. Multiple climbers in the area began a rapid and efficient evacuation. MM was loaded into a ski area litter and lowered two 60-meter pitches of low angle snow and ice, where paramedics were met and informed of the patient's issues. It took two hours or less in total and MM arrived at Vail Valley Medical Center.

Analysis

A number of positive influences and emotions set up for a bad decision to climb The Fang on this day. A few other local friends who are experienced climbers in the area showed nothing but positive views and support for MM's interest of climbing the formation that day. Very few negative concerns were expressed. MM had been in the area consistently since early