

United States Court of Appeals For the First Circuit

No. 22-1226

BRENDAN HOOVER,
Plaintiff, Appellant,

v.

HYATT HOTELS CORPORATION; OTIS ELEVATOR COMPANY,
Defendants, Appellees.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

[Hon. William G. Young, U.S. District Judge]

Before

Kayatta, Lipez, and Thompson,
Circuit Judges.

John A. Mangones, with whom Godbout Law PLLC was on brief,
for appellant.

Bridget A. Lopez, with whom Corey T. Mastin and Morrison
Majoney LLP were on brief, for appellee Hyatt Hotels Corporation.

Steven J. Zakrzewski, with whom John J. Robinson and Gordon
Rees Scully Mansukhani, LLP were on brief, for appellee Otis
Elevator Company.

April 22, 2024

LIPEZ, Circuit Judge. Struck in the head by a descending elevator gate, appellant Brendan Hoover brought this diversity action against appellees Hyatt Hotels Corporation, the premises owner, and Otis Elevator Company ("Hyatt," "Otis," or the "Companies"), seeking damages for injuries allegedly caused by their negligence. Hyatt and Otis each moved for summary judgment and sought to exclude from the record as unsupported conjecture the opinion of Hoover's expert that the visibly worn-down condition of the elevator's rubber "astragal" caused Hoover's injury. Following a hearing on the motions for summary judgment, the district court held that -- even accepting "arguendo" the admissibility of the contested expert evidence -- Hoover failed to present anything other than speculation about an observable defect. Hence, the district court granted summary judgment for Hyatt and Otis without actually ruling on the admissibility of the expert evidence. After careful review of the full record, we affirm.

I.

A. Background

We summarize the relevant facts and background, which are undisputed unless otherwise noted, in the light most favorable to Hoover, the non-moving party. See González-Arroyo v. Drs.' Ctr. Hosp. Bayamón, Inc., 54 F.4th 7, 18 (1st Cir. 2022).

Hoover -- a Massachusetts resident employed as a travelling audio-visual ("AV") "event and stage technician" -- was on site at the Hyatt Regency in Bellevue, Washington (the "Hotel") to provide AV equipment and related services for a convention. On the night of February 25, 2020, Hoover was attempting to dislodge an equipment case stuck in the doorway of the Hotel's freight elevator when an alarm started ringing and the elevator's metal gate came down, striking the back of Hoover's head before retracting. The impact left Hoover with a "substantial brain injury" (the "Incident"). At the time of the Incident, Hyatt had a contract with Otis to maintain and service the Hotel's elevators.

1. The Elevator and its Safety Edge

Installed in 2008 as the Hotel's only dedicated freight elevator, the elevator at issue (the "Elevator") is not intended for use by the general public. At times referred to as the Hotel's "big freight," the Elevator has the capacity to hold 9,000 pounds -- indeed, it is both large and strong enough that "you [could] actually put a car in it."

Serving five landings at the Hotel -- including the loading dock and the floor where the Incident occurred, Level 2A -- the Elevator has two entrances, opening on one side at the loading dock and on Level 2A and on the opposite side at the other

landings. The Elevator is equipped with a "Peelle¹ door package," consisting of a set of "hoist way doors" stationed at every landing² as well as "gates" attached to both the front and rear of the "cab," travelling up and down through the Elevator's shaft along with it. Each of these gates is a single piece of metal paneling that closes by sliding down from the top of the cab.

To allow the Elevator to transport large and heavy loads securely, its landing doors and the gates attached to the cab open and close automatically, working in tandem on a sequential cycle. Specifically, upon the Elevator's arrival at a floor of the Hotel, first the relevant set of landing doors and then the cab's front or rear gate open. Before the cab can then travel on to another landing, the gate must descend nearly all the way back down to the floor to allow the landing doors to start closing; both the gate and doors must be fully closed for the cab to travel; and, upon arrival at the selected landing, the gate must retract most of the way back up before the landing doors can open, allowing for the operator to exit and unload any freight.

¹ Peelle Company Ltd. is a global provider of freight elevator doors and related equipment.

² The landing doors consist of two "biparting" panels, with the top panel sliding upwards to open and downwards to close, and the bottom panel opening downwards and closing upwards, like a jawless mouth. The doors are relevant to this litigation only to the extent that they open and close on the same automatic cycle as the gate.

The Elevator also is equipped with various safety mechanisms designed to guard against damage to the freight and injury to its operators, including "gate strike" injuries like the one sustained by Hoover. Two of these features are standard safety measures. Signs posted on the Elevator convey the following warnings: "Caution! Automatic Gate! Audible Warning Will Sound When the Gate is Closing;" and "THIS IS NOT A PASSENGER ELEVATOR. NO PERSONS OTHER THAN THE OPERATOR AND FREIGHT HANDLERS ARE PERMITTED TO RIDE ON THIS ELEVATOR." The "[a]udible [w]arning" is a "loud" alarm -- referred to by some witnesses as the "annunciator" -- designed to begin ringing five seconds before either gate starts to descend and to continue sounding until both the gate and the doors are fully closed.³

Two other safety features are door and gate "reopening devices," intended to avoid or limit harm when people or objects are in the path of the descending gate. Each elevator entrance has a "light curtain" designed to prevent the gate from descending when an "obstruction" is sensed below it. Described as a "non-contact reopening device," the Elevator's light curtains operate much like those prompting the familiar self-opening doors one finds at the entrance of a supermarket. That is, a person or object

³ It is undisputed that the audible alarm was sounding at the time the gate descended and struck Hoover, and no argument has been made that the alarm was not functioning as designed or that the Elevator's signage was in any way insufficient.

passing through the Elevator's entryway breaks apart infrared light rays extending across the doorway (though not visible to the naked eye), signaling the Elevator's gate to remain open -- or, if a gate has already started its descent at the time the object or person passes through the light curtain, the gate stops and then retracts.⁴

The pause in the gate's descent when the light curtain is broken lasts for only twenty seconds. If at that point an object continues to obstruct the door, the light curtain will "time out,"⁵ and the alarm will start sounding. The Elevator will then resume its closing cycle.⁶ In other words, as Hoover's expert Paul

⁴ Hoover has not asserted that the Elevator's light curtain was malfunctioning. Indeed, Hoover's expert, Paul Ahern, acknowledged at his deposition that, without a physical exam of the Elevator, he could "only speculate" and "ha[d] no way of knowing" whether the light curtain was not operating as designed. The Companies and their experts insist that all the Elevator's safety features, including the light curtain, were functioning.

⁵ The parties and their experts agree that such a "time-out feature" is both standard and legally permissible (under relevant codes and disability law) so long as there is a minimum of twenty seconds between the gate retracting and starting to close again -- allowing sufficient time in most circumstances for the safe passage into the Elevator by a wheelchair user or to dislodge an object stuck in the doorway.

⁶ In describing the light curtain's time-out feature, an elevator safety inspector for the state of Washington explained that after the gate retracts because of an object sensed in the entryway, the gate can come down again -- but only if more than twenty seconds has passed. He further explained: "[i]n other words -- that means the [gate and doors] are going to shut anyway. And that's what the annunciator is for. It went off five seconds prior to the [gate] coming down. So if you obstruct the [gate] long

Ahern phrased it, the Elevator's gate could end up "descend[ing] regardless of the presence of an object in its path."

This possibility that the descending gate could strike an object or person lingering in the doorway -- even with the alarm ringing and with the Elevator's light curtain functioning properly -- is addressed by the Elevator's "safety edge," a type of "contact reopening device."⁷ The safety edge, according to the collective testimony of the experts, consists of multiple parts, including: (1) a layer of pliant rubber (sometimes referred to as "the astragal" or the "boot"); (2) a metal bracket running along the entire bottom edge of each gate, above the rubber, to hold the rubber in place; (3) wiring running through the rubber's interior; and (4) an electrical box housing the safety edge's switch. In the event the Elevator's gate strikes an obstacle as it descends,

enough for [the light curtain] to time out, then the [gate] will start closing" with the alarm sounding.

Based on this testimony, it is our understanding that the alarm sounds whenever the gate is descending. Therefore, when an object passes through the light curtain before the gate has started its descent -- signaling the gate to remain open -- the alarm does not ring while the object moves through the entryway. The alarm would start about twenty seconds later, providing notice that the gate is about to descend. On the other hand, if someone enters the Elevator and breaks the light curtain while the gate is already descending -- signaling the gate to stop and retract -- the alarm would have been ringing as the person entered.

⁷ In the words of one expert, the Elevator's "'happy state' is with the doors and gates closed[, s]o if you hold it too long, then it will just try to close anyway, and then that's when your safe[ty] edge comes into play."

the safety edge's rubber astragal "compresses" into the interior wiring, sending a signal that trips a switch, thereby causing the gate to stop and "immediately" reverse. Hence, by its very design, the Elevator's safety edge "require[s] contact to reverse [the] direction of the gate."

2. Hoover's Account of the Incident

In his complaint and deposition testimony, Hoover recounted the following description of the Incident, which occurred on his third day working at the Hotel. On each of the workdays leading up to the Incident, Hoover, who used freight elevators regularly due to his line of work, used the Elevator about "eight or nine times" to move AV equipment up and down between floors of the Hotel, including Level 2A. Hoover stated that, during this time, he at no point noticed "anything unusual" about the operation of the Elevator, nor did he recall anyone mentioning to him that the Elevator was not working properly.

Through this usage, including a "handful" of times on the day of the Incident, Hoover observed that the Elevator's doors and gate would open automatically at the floor where he boarded and then again at the selected destination. At the loading dock, Hoover and his coworkers discovered that they could keep the Elevator's gate and door from closing while loading and unloading AV equipment, seemingly indefinitely, by propping an object in the

doorway.⁸ Hoover said that when they did so, the Elevator's alarm would sometimes sound for over a minute without the gate descending at all. But, in the event the gate did begin its descent, the gate would always "immediately" retract upon sensing an object in its doorframe, never colliding with the object below.⁹

Hence, at the end of his third workday at the Hotel, when the back wheels of a heavy equipment case got stuck on "the lip" of the doorway between the Elevator and Level 2A, Hoover paid little heed when the Elevator's alarm began ringing "loudly." He instead continued in his effort to dislodge the case, leaning down onto it while simultaneously pushing forward. Hoover later explained at his deposition that he "did not believe [the gate] was going to close" because he and the case remained in the doorway, and "there's a safety sensor in all of those elevators that [he had] worked in prior to this" that Hoover believed was

⁸ Hoover said that prior to the Incident he had not attempted to keep the Elevator propped open on any level of the Hotel other than the loading dock.

⁹ Although Hoover's description of what occurred appears to differ from the expert testimony regarding the expected or actual functioning of the Elevator's light curtain and alarm, we need not dwell on any inconsistency because Hoover's assertion of negligence is based solely on the allegedly defective condition of the astragal. See infra.

"not supposed to let" the gate come down if there was an obstacle below.¹⁰

This time, however, the Elevator's gate did come down. In Hoover's words, "five to ten seconds" after the alarm started ringing the gate "slammed" into the back of his head and side of his cheek, pinning Hoover's head between the gate and the case, before stopping and retracting. Hoover said that the ordeal took no longer than "maybe a minute, minute and a half," and that the gate itself descended so quickly that he believed there was nothing he could have done to avoid being struck.

Hoover "immediately" told his on-site manager, Edward Harrison, that he had been hit in the head by one of the Elevator's gates. About an hour later and still with an "excruciating headache," Hoover walked back to his lodging, hoping he would "be okay with a little bit of rest." The following morning, Hoover went to a nearby hospital where a CAT scan revealed he had a "crushed basilar artery." Shortly thereafter, when Hoover had returned to Massachusetts, a neurologist diagnosed Hoover with "postconcussive syndrome" with symptoms of fatigue, difficulty concentrating, recurring headaches, and "fogginess." Hoover

¹⁰ Again, we provide here, at face value, Hoover's explanation for his decision-making at the time of the Incident. As described below, Hoover's stated belief about how the Elevator was supposed to function differed from the expert testimony (including much of Ahern's) about how the Elevator was designed to function.

testified at his deposition that he has continued to experience, among other things, frequent headaches, watery eyes, and poor memory; has difficulty using screens for extended periods of time; and has had multiple seizures.

3. The Harrison Video

On the day following the Incident, the on-site manager Harrison recorded a video in the same location where Hoover was struck, Level 2A, showing the Elevator's gate striking an AV equipment case in its path. Hoover and Harrison both later explained that Harrison took the video to reenact and record "what the [E]levator [was] doing" at the time of the Incident -- with all the conditions the same save for the absence of Hoover.¹¹ Harrison more specifically recounted that he placed the case in the doorway, and he then pressed record a "few seconds" after the alarm began to sound. Describing the resulting footage, Harrison

¹¹ Otis argues that Hoover neglected to establish that the gate depicted in the video and the gate that struck Hoover were one and the same. However, given the deposition testimony from Hoover and Harrison that the gate filmed was the same gate that hit Hoover; the apparent acceptance by experts for both sides that the filmed gate and the injurious gate were the same; and "drawing all reasonable inferences from th[e] facts" in favor of Hoover as the non-moving party, Lapointe v. Silko Motor Sales, Inc., 926 F.3d 52, 54 (1st Cir. 2019), we accept Hoover's position that the Harrison video contains footage of the same gate that hit Hoover's head during the Incident.

No suggestion has been made (by either party) that the Elevator was altered or repaired in any way between the time of the Incident and the time of Harrison's video footage.

said: "[T]he [E]levator begins to beep, signaling that the [gate] is about to close; the [gate] then begins to close and strikes the case that's in the way." The video then shows the gate retract upon hitting the equipment case.

4. The Elevator's Inspection History

Sometime shortly after the Incident -- and after Harrison made his video -- the Elevator was taken out of service temporarily. It is also undisputed that the morning following the Incident a Hotel security guard and an Otis mechanic both conducted inspections of the Elevator -- with each concluding that the Elevator's gate, alarm, light curtain, and safety edge had been functioning properly at the time of the Incident and that the Elevator appeared to be in working order in all respects.

Hoover and Harrison testified that they believed the Elevator also was taken out of service so that repairs could be done, and that the repaired Elevator was then returned to service in time for Harrison's crew to "load out" all the equipment from the Hotel at the end of the conference. Otis and Hyatt counter that the Elevator was taken out of service per protocol for any reported accident and, following inspection and without any repairs being made, the Elevator was returned to service.¹²

¹² We see no genuine issue of material fact in the disagreement between Hoover and the Companies on whether repairs were performed following the Incident. Even viewing the record in the light most

Three days after the Incident, Tim Stolmeier, an inspector for the Washington State Department of Labor and Industries who has worked in the elevator industry since the early 1980s, conducted an independent accident inspection for the state. In his inspection report (the "State Incident Report") and in his deposition, Stolmeier stated that, among other things, he reviewed the Elevator's maintenance records and "thoroughly inspected the doors, floors, lighting, door pressures, door speeds, annunciators, safety switches and door timing," finding each to be operating properly and "well within code compliance." Stolmeier further testified that, to ensure that it was safe for the Elevator

favorable to Hoover, as we must, Hoover does not identify any evidence to corroborate his claim of immediate repair, asserting instead only that Otis's maintenance and repair records are incomplete or even deceptive. Harrison, his supervisor, explained at his deposition that he surmised that work had been done because all "the sensors" were functioning properly when he and his colleagues were permitted to resume using the Elevator, but he readily admitted that he had no personal knowledge of any specific maintenance or repairs to the Elevator while it was out of service. Hoover likewise testified in his deposition that he believed the Elevator was shut down for repairs, but then also testified that someone "from the elevator company" -- whose name he could no longer remember -- called him during the days after the Incident to say that their inspection showed that only "one of two" safety mechanisms worked on the Elevator, which was all that was required by safety code, and therefore no repairs had been needed.

The Companies, on the other hand, supported their position with testimony and incident reports from various Otis employees and Hotel workers, each of whom denied that they or anyone else made repairs to the Elevator in the immediate aftermath of the Incident. Hoover's contrary speculation, unsupported by any evidence, is inadequate to create a factual dispute.

to return to service, he followed his routine procedures to test the functionality of the alarm, light curtain, and safety edge. Following this inspection, Stolmeier informed Otis that it could return the Elevator to service immediately, without noting any need for maintenance or repair.

Stolmeier also had inspected the elevator seven weeks before the Incident, on January 7, 2020, in a regular annual inspection required by the State of Washington. In the State Incident Report, Stolmeier noted that he had reviewed the January 2020 inspection report and found that it similarly "reflect[ed] no contributing factors or non[-]compliances" that could have been related to the Incident. When deposed, Stolmeier confirmed more specifically that this prior annual inspection had also encompassed routine testing of the "annunciator" and each gate's "astragal," "infrared sensor," and "closing speed," and that the Elevator had passed all such testing. Stolmeier also confirmed that all identified code non-compliances or other issues flagged in the annual inspection report from the prior year (2019) had been fixed or otherwise addressed by Otis or Hyatt before his January 7, 2020 inspection.

Based on his pre- and post-Incident inspections, Stolmeier concluded that, in his professional opinion, Hoover's "accident [wa]s not related to failure of the [Elevator]," including any of its safety or conveyance systems. Rather, he

believed it to be likely that Hoover "was in the door for some time with the cart being stuck, that the [light curtain] had timed out and the [gate] came down with an alarm," as expressly permitted by the safety code and consistent with the expected functionality of freight elevators akin to this one.¹³

B. The Proceedings Below

In August 2020, just shy of six months after the Incident, Hoover sued Hyatt in federal court asserting a common law claim for negligence. After Hyatt filed a third-party complaint against Otis, Hoover amended his complaint to add Otis as a defendant. In suing Otis and Hyatt, Hoover asserted that each had a duty to use reasonable care to maintain the elevator in a safe condition (including an obligation to inspect, repair, and replace defective¹⁴ parts of the Elevator); that the Elevator was unsafe because the gate that hit him "lacked a working sensor;" and that this lack of a "critical sensor" caused him to suffer a brain injury when the gate closed on his head.

¹³ Stolmeier's opinion is consistent with the collective expert testimony describing how the Elevator was designed to function and with the opinion offered by the Companies' experts, Mark Hollinger and Russell Morrison, that the Elevator was functioning as designed when Hoover was struck in the head by the descending gate.

¹⁴ Though employing the word "defective," Hoover has not lodged a design defect claim against Otis. Rather, Hoover appears to use the term "defective" in referring to degenerated or otherwise malfunctioning parts.

1. The Competing Experts

Hoover retained Ahern, who had nearly forty years of experience in the elevator industry, as an expert witness to explain how elevators such as this one operated and to opine on the cause of his injuries. To inform his opinion on liability, Ahern reviewed the Harrison video and various inspection reports of the Elevator, among other things, but did not inspect the Elevator in person. As further described below, Ahern expressed the view in his written report that the "safety edge" on the Elevator's metal gate was "poorly maintained" and "worn down," and therefore not thick enough to "operat[e] as intended," and that it was this plainly visible defect on the Elevator that caused Hoover's injury.

When deposed, Ahern clarified that it was more specifically the descending gate's "astragal" -- i.e., the rubber part of the safety edge -- that was problematic in that it was visibly smaller than the astragal on the Elevator's other gate. In his report and at deposition, Ahern at times used the term "astragal" to refer only to "the boot on the gate," i.e., the rubber portion of the safety edge. At other times, he appeared to use the word "astragal" interchangeably with "safety edge" (the full component consisting of the rubber exterior as well as its electrical components). Here we use the term astragal only to refer to the rubber component of the safety edge.

Ahern suggested that, in addition to its function as part of the triggering mechanism of the safety edge, the astragal also was designed to serve a critical cushioning function. Ahern did not identify any code or other legal provisions with which the Elevator, its safety edge, or its astragal failed to comply, relying instead on his professional experience of having never previously encountered an astragal as small as the one in the Harrison video appeared to be -- i.e., about one to two inches deep instead of about four inches. And, "because [he had] seen enough freight elevator gates to know," Ahern said he was certain that the astragal on the descending gate seen in the Harrison video did "not appear large enough" to properly trigger the retraction of the descending gate or to cushion its metal edge sufficiently, resulting in the serious injury sustained by Hoover.

Ahern also stated that his review of the Elevator maintenance records for the five-year period leading up to the Incident indicated that not only had the Elevator's most recent annual maintenance not been completed prior to the Incident, but also that each of the Elevator's two prior annual inspections (undertaken in 2018 and 2019) indicated that the Elevator was "defective" on the date of the Incident. Ahern suggested that these records established that the Elevator's gates and doors, particularly, had a notable number of past "callbacks" (i.e., "service calls" and "entrapments"). As an example, Ahern

highlighted one notation from the Elevator's 2018 state inspection referencing a "damaged door gate edge electrical box."

Otis and Hyatt provided opinions from their own experts, including Mark Hollinger, also with about forty years of experience in the elevator industry, and Russell Morrison, Otis's Service Operations Manager, who previously had worked for the company as an elevator mechanic. Otis and Hyatt also relied extensively on the State Incident Report, prior state annual inspection reports, and deposition testimony of Stolmeier -- the Washington state inspector who conducted the annual inspections and the post-accident inspection -- all of which, they maintained, offered an objective and independent assessment of how the Elevator functioned. Not surprisingly, the Companies highlighted Stolmeier's conclusion that neither the Incident nor the harm experienced by Hoover were caused by a failure of the Elevator's safety systems.

Hollinger inspected the Elevator in person in November 2021, approximately nine months after the Incident, and reviewed, among other things, the above-described inspection reports, the Harrison video, and an affidavit submitted by the Elevator's regular route mechanic. Citing to various code provisions,¹⁵

¹⁵ According to Otis, Hyatt, and their experts, the Elevator was installed under -- and at the time of the Incident was governed by -- the American Society of Mechanical Engineers Safety Code for

Hollinger opined in his report and affidavit that both Stolmeier's State Incident Report and his own investigation showed that the Elevator was within code compliance for all safety mechanisms, including the full safety edge and each of its component parts. More specifically, Hollinger noted that the "rubber component of the safety edge" (or astragal) on each of the car gates "measured 1.25 inches in height" and -- in both the Harrison video and at the time of his own inspection -- appeared to be in "good condition and properly maintained."¹⁶ Hollinger additionally attested that each of the Elevator's safety features was functioning correctly and as designed, including the relevant gate's contact reopening device (i.e., its safety edge) -- which effectively and "immediately" re-opened the gate upon contact with an object below.

Morrison similarly testified at his deposition that the Harrison video showed each of the Elevator's safety features to be code compliant and working as designed, including the safety edge on each descending gate. More specifically, Morrison estimated

Elevators and Escalators, ASME A17.1-2004, which was the code adopted by the State of Washington for elevators installed between January 1, 2008, and January 1, 2014. See Wash. Admin. Code §§ 296-96-00600, 296-96-00675. Though not relying on this code provision in his report, Ahern in his deposition appeared to concede that it was "correct" to apply this version of the Washington State code to the Elevator.

¹⁶ Hollinger also stated that each gate, along with its respective light curtain and safety edge, travelled with the Elevator and therefore functioned the same way at each level of the Hotel.

the height of the full safety edge component (including its astragal) to be "a couple of inches," and said that it appeared to be similar in size to ones he had seen and worked with in the past. Morrison additionally testified that the Harrison video plainly showed "the gate alarm [] going off to warn that the gate is closing, the gate then proceeds to move down, hits [the staged AV equipment case], reverses, starts coming back up." Morrison explained that the light curtain would have timed out because the door had been open for well over twenty seconds as a result of the stuck equipment case in its opening. Morrison then opined that, based on his professional experience, he was certain that the Elevator's safety edge, and its component parts (including the astragal), were functioning properly to trigger the gate to reopen upon contact with an object below. If they had not been, he said, the descending gate would have failed to reverse after striking the staged equipment case.

Hollinger and Morrison also each reviewed the written records kept on site as well as electronically recorded activity in Otis's "On-Line History Report." Based on their respective reviews, both concluded that a full examination of these records revealed no indication of prior issues related to the Elevator's gates or its reopening devices (including the gate's safety edges) and showed no reported gate strike incidents in the five years leading up to the Incident.

Hollinger additionally noted that, while it was true that the Elevator had twelve "equipment-related callbacks" in 2019 prior to the Incident, this was not, in his experience, an unusually high number for freight elevators of this type. Moreover, none of these callbacks involved the specific gate that struck Hoover or any of the Elevator's reopening devices, including the safety edges. Morrison likewise explained that the Elevator's maintenance records were kept both on paper and electronically, and only when viewed together would such records provide a complete view of all prior work performed on the Elevator. Morrison said that the Otis employee who serviced the Elevator for "maintenance callbacks" at the relevant time for the Hotel routinely checked all the safety mechanisms during each visit, including the safety edge and each of its component parts, even if such tests were not specifically noted in the maintenance records.

In response to Ahern's specific reference to the relevant gate's safety edge "box" needing "to be replaced" in 2018, Morrison explained that the box itself had at some point hit something, becoming "disfigured a little to where the lid couldn't be put back on," and that after the issue was noted in the state inspection and well before the Incident, the box was replaced. In short, Hollinger and Morrison each concluded that Ahern's review of the Elevator's maintenance records was incomplete at best, and that the Elevator's full inspection reports did not provide any

indication of lack of maintenance or a need to repair or replace a relevant safety feature (including their component parts) or other relevant problem with its doors and gates.

2. Defendants' Daubert and Summary Judgment Motions

Asserting that the expert evidence underpinning Hoover's case was too speculative to be admissible and that, with or without this contested evidence, Hoover's theory of negligence was too speculative to establish their liability, Otis and Hyatt each filed motions to exclude Ahern's report and deposition testimony from the record along with separate and simultaneous motions for summary judgment.

More specifically, citing to Federal Rule of Evidence 702 and Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 589 (1993), Otis and Hyatt argued that the court should not permit Hoover's expert Ahern to "submit his ipse dixit and speculation to the jury" because "his proffered opinions fall far short of the [required] standard of evidentiary reliability." In so moving, the Companies accepted Ahern's qualifications as a long-time elevator industry worker to offer such an expert opinion based on his own professional experiences. However, Otis and Hyatt asserted that Ahern's opinion in this instance should be excluded because he neither explained how his professional experience led to the conclusion he reached nor supported that conclusion with objective facts or any articulated standard. Rather, the Companies asserted,

Ahern's opinion "boiled down to speculation that a part he never measured may be too small." In response, Hoover countered that Ahern's testimony was reliable, and therefore admissible, based on both his extensive professional experience and his careful adherence to "sound methodology."

In their motions for summary judgment, Hyatt and Otis each contended that -- with or without Ahern's speculative evidence -- the record failed to show any problems with the safety or structure of the Elevator and that, regardless, they had neither actual nor constructive notice that any part of the Elevator was not functioning as designed. In opposition to these motions, Hoover argued that Ahern's report and testimony established that the improperly maintained "safety edge" had become too thin, causing the gate to hit Hoover's head with too much force, resulting in his serious injuries. Hoover additionally maintained that both Hyatt and Otis had notice of this specific problem with the Elevator because the deterioration and size of the gate's astragal was "plainly apparent upon visual examination," and the Elevator's inspection history showed extensive issues with the Elevator's gates and doors.

After hearing oral argument on the defendants' motions for summary judgment, but without a Daubert hearing or inquiry regarding the challenges made to the admissibility of Ahern's report and testimony, the district court granted summary judgment

from the bench for both defendants. In explaining its reasoning, the court stated that even "accepting . . . *arguendo*" Ahern's "so-called expert report" and deposition testimony that the gate's astragal was visibly worn down, "[t]here simply is no adequate evidence" in the summary judgment record "other than speculation" that would either "show a defect" or establish that "the alleged defect . . . was apparent to anyone skilled or unskilled."¹⁷ Relying on its *arguendo* approach, the district court did not issue an explicit ruling on the defendants' motions to preclude Ahern's report and testimony. Hoover timely appealed the district court's grant of summary judgment.

II.

A. Standard of Review and Applicable Law

When appropriately granted, summary judgment becomes "a means of avoiding full-dress trials in unwinnable cases, thereby freeing courts to utilize scarce judicial resources in more beneficial ways." Murray v. Kindred Nursing Ctrs. W. LLC, 789 F.3d 20, 24-25 (1st Cir. 2015) (quoting Mesnick v. Gen. Elec. Co., 950 F.2d 816, 822 (1st Cir. 1991)). But, in our *de novo* review, we will affirm only if there is no genuine dispute as to any

¹⁷ We assume that the district court used "skilled" to allude to Otis, with its specialized knowledge of elevators, and "unskilled" as a nod to Hyatt's argument that there could be no expectation of any such specialized knowledge for the owner of the premises.

material fact and the movant is entitled to judgment as a matter of law. González-Arroyo, 54 F.4th at 18; Fed. R. Civ. P. 56(a).

While we draw all reasonable inferences in favor of the nonmovant, we will not "credit bald assertions, empty conclusions, [or] rank conjecture." Cabán Hernández v. Philip Morris USA, Inc., 486 F.3d 1, 8 (1st Cir. 2007). Moreover, "if a nonmovant bears the ultimate burden of proof on a given issue, he must present definite, competent evidence sufficient to establish the elements of his claim in order to survive a motion for summary judgment." Alston v. Int'l Ass'n of Firefighters, Loc. 950, 998 F.3d 11, 24 (1st Cir. 2021) (alterations and internal quotation marks omitted) (quoting Pina v. Children's Place, 740 F.3d 785, 795-96 (1st Cir. 2014)); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986).

In a federal diversity case, "[s]tate law supplies the substantive rules of decision," Lapointe v. Silko Motor Sales, Inc., 926 F.3d 52, 54 (1st Cir. 2019), and the parties agree that here Massachusetts law controls.¹⁸ Under Massachusetts law, the plaintiff in a negligence suit must establish the familiar elements of a negligence claim: duty, breach, causation, and damage. See Jupin v. Kask, 849 N.E.2d 829, 834-35 (Mass. 2006). In other

¹⁸ Hoover maintained that Massachusetts law controls because Hoover is a Massachusetts resident, and the Companies did not contest the point (even though the accident occurred in Washington).

words, the fact that the gate strike occurred -- or that Hoover was injured -- is insufficient on its own to prove negligence on the part of the Companies. See Enrich v. Windmere Corp., 616 N.E.2d 1081, 1084-85 (Mass. 1993); Evangelio v. Metro. Bottling Co., 158 N.E.2d 342, 345 (Mass. 1959); Gardner v. Simpson Fin. Ltd. P'ship, 963 F. Supp. 2d 72, 82 (D. Mass. 2013) (noting the "principle that there must be some proof of [an accident's] cause and the issue cannot be decided by the application of *res ipsa loquitor*"). With respect to elevator injuries more specifically, Massachusetts courts have made clear that the presence of a malfunctioning part in an elevator also is insufficient on its own to support a finding of negligence. See, e.g., Bernstein v. Highland Assocs. of Worcester, Inc., 294 N.E.2d 576, 578 (Mass. App. Ct. 1973) (holding that plaintiff failed to establish that defendant had notice of a deteriorated elevator condition and failed to repair it). Rather, the plaintiff in an elevator accident case must produce evidence that the faulty part caused the injury, along with evidence that a defendant knew or reasonably should have known of the dangerous condition prior to the accident. See id.; Usher v. Otis Elevator Co., No. 0568-CV-0318, 2009 WL 1580318, at *1-*2 (Mass. App. Div. June 2, 2009) (affirming summary judgment for defendant elevator maintenance contractor where plaintiff failed to establish defendant knew or should have known of alleged problem with the elevator's doors); Thibodeau v.

Ballardvale Tr. Three, LLC, No. 023293, 2006 WL 832865, at *3 (Mass. Super. Ct. Mar. 6, 2006) (similar); McInnis v. Root, No. 03-05368-E, 2005 WL 3629323, at *3-*4 (Mass. Super. Ct. Nov. 3, 2005) (similar).

Hoover says the record reveals a material factual dispute concerning whether his injury was caused by the defendants' negligence in failing "to replace and repair the safety edge on the freight [E]levator gate" or, more specifically, its visibly worn-down and too thin rubber astragal component. Otis and Hyatt counter that summary judgment was properly granted because: (1) the condition and size of the astragal are only material if they impact the functionality of the safety-edge, and Hoover offered no record evidence to dispute the ample evidence in the record establishing that the safety-edge -- including each of its component parts -- was up to code and functioning as designed; and, in any event, (2) Hoover offered no evidence that Otis or Hyatt had notice such that their failure to adequately maintain the safety edge or its astragal constituted actionable negligence.

Before addressing these contentions, we briefly discuss the district court's decision to consider Ahern's report and testimony in addressing the factual adequacy of Hoover's negligence claim without first expressly determining the admissibility of the expert's opinions.

B. Daubert and the Admissibility of Ahern's Evidence

We have long entrusted federal trial judges to be "gate-keeper[s]," empowered by Rule 702 and Daubert, to "ensure that an expert's testimony 'both rests on a reliable foundation and is relevant to the task at hand.'" United States v. Vargas, 471 F.3d 255, 261 (1st Cir. 2006) (quoting Daubert, 509 U.S. at 597). "[T]he overarching concern is on the 'evidentiary relevance and reliability' of the proposed testimony," with speculative expert testimony often satisfying neither criterion. Seahorse Marine Supplies, Inc. v. P.R. Sun Oil Co., 295 F.3d 68, 81 (1st Cir. 2002) (quoting Daubert, 509 U.S. at 595); Boucher v. U.S. Suzuki Motor Corp., 73 F.3d 18, 22 (2d Cir. 1996). The obligation to perform this gatekeeping role necessarily applies at the summary judgment stage of litigation given the objective to avoid prolonging a case that lacks merit. See, e.g., Cortés-Irizarry v. Corporación Insular De Seguros, 111 F.3d 184, 188 (1st Cir. 1997).

Even when a court rejects a challenge to a proffered expert at summary judgment, however, the expert's testimony is subject to the same scrutiny and weighing as any other evidence offered on behalf of a party. Though the Supreme Court emphasized in Daubert that exclusion is not the appropriate route for "shaky but admissible evidence," 509 U.S. at 596, we have observed that "the mere existence of an admissible expert" still is not on its

own "enough to surpass the summary judgment blade," González-Arroyo, 54 F.4th at 18.

In other words, an expert may generally be qualified such that the evidence he provides is admissible, but, in the summary judgment context, the question remains whether the expert's views in the case at hand generate a material dispute of fact. See id. (affirming summary judgment where "[appellant] does not, as [appellant] must, point to any specific finding in [the admitted expert] report to support [appellant's] claim, or any other admissible evidence to boot"). Hence, a party's "reliance on a bare ultimate expert conclusion" is not "a free pass to trial." Hayes v. Douglas Dynamics, Inc., 8 F.3d 88, 92 (1st Cir. 1993); see also Whitney v. Wal-Mart Stores, Inc., No. 03-65-P-H, 2003 WL 22961210, at *4 (D. Me. Dec. 16, 2003) ("Although expert testimony should be excluded if it is speculative or conjectural, or if it is based on assumptions that are so unrealistic and contradictory as to suggest bad faith or to be in essence an apples and oranges comparison, other contentions that the assumptions are unfounded go to the weight, not the admissibility, of the testimony."), R. & R. adopted, No. CIV. 03-65-P-H, 2004 WL 114987 (D. Me. Jan. 21, 2004).

Here, without engaging in the Daubert inquiry into the admissibility of Ahern's expert testimony, the court accepted *arguendo* the admissibility of that testimony, but concluded that,

on the record before it, Ahern's opinions fell short of creating a factual dispute warranting a trial on Hoover's negligence claim. Given the district court's acceptance of Ahern's expertise in evaluating the motions for summary judgment -- an approach that favors Hoover -- and because we conclude that the court properly granted summary judgment for the Companies, we too presume under Daubert the admissibility of Ahern's expert opinion in our de novo review.

C. The Summary Judgment Ruling

In his complaint, Hoover alleged a theory of liability that the "freight elevator was unsafe in that it lacked a working sensor" to "prevent the gate from crushing individuals exiting the doorway" -- seemingly referring to either or both the Elevator gate's light curtain sensor and "the sensor in the safety edge." On summary judgment, and consistent with the evidence offered by his expert, Hoover's theory of liability narrowed to the allegedly worn-down astragal component of the gate's safety edge, and the impact that the deterioration allegedly had on its functioning.

In his summary judgment briefing and on appeal, however, Hoover also makes undeveloped references to alternative theories of liability -- including that Hoover and Harrison's deposition testimony indicated that the Elevator's light curtain may have been disabled or that the Elevator may have operated differently at various landings and that such variation itself perhaps

reflected other problems with the Elevator's functionality.¹⁹ As Hoover has failed, however, to explain or support any alternative theories of negligence in his complaint, summary judgment briefing, or appellate briefing, we consider all such theories -- i.e., other than his claim premised on the allegedly deteriorated astragal -- to be waived and do not address them. See, e.g., Mirabella v. Town of Lexington, 64 F.4th 55, 56-57 (1st Cir. 2023); United States v. Zannino, 895 F.2d 1, 17 (1st Cir. 1990).

Hoover's theory of negligence based on the faulty condition of the astragal depends on two central premises: (1) the astragal was visibly worn-down; and (2) the worn-down astragal critically impacted how the safety edge functioned and, thus, should have been replaced. Hoover relies entirely on Ahern's report and testimony to demonstrate genuine issues of material fact concerning these premises. We thus must consider whether he has successfully done so.

1. The Size and Condition of the Astragal

Ahern's theory of liability is limited to the condition of the exterior, visible portion of the astragal component of the safety edge. Ahern explained that, without a physical inspection

¹⁹ In response, Otis and Hyatt cite expert testimony indicating that the Elevator's relevant safety devices were functioning and that they shared timing mechanisms or were located on the Elevator car itself -- thereby rendering it "impossible" for the Elevator to operate differently on different levels.

of the Elevator, he could not "see inside the rubber astragal" to analyze what was going on within. Accordingly, Ahern declined to offer an opinion as to the condition of the safety edge's other component parts, including its interior wiring, switch, or electrical box. Ahern asserts in his report that, based on viewing the Harrison video, the astragal on the gate that hit Hoover was visibly smaller than the astragal on the opposing gate (also shown in the video's background) and, as such, was inadequate.

At his deposition, Ahern further specified that, in his professional experience, the rubber astragal on the edge of a descending gate should be "at least four inches" in depth whereas this one looked to be "about an inch and a half." Although Ahern did not measure the size of either gate's astragal himself -- and, indeed, never visited the hotel or saw the Elevator in person -- his estimate of the astragal's size is supported by a measurement of 1.25 inches provided by the defendants' expert Hollinger and is further corroborated by an estimate offered by defendants' expert Morrison.

Ahern, however, offers no support -- other than his professional experience -- for his assertion that the astragal should have been thicker. He cites no code provision or other source governing the size of the rubber component. Then, when questioned by Hyatt's attorney, Ahern acknowledged that a "technical drawing" in an April 2020 Peelle "parts guide" -- used

by elevator technicians to order replacement parts for elevators -- showed the height of a new astragal to be "2.2 inches." Even then Ahern made no effort to reconcile this measurement of a new part with his own observation that the astragal ought to be nearly twice that size to function properly. Ahern likewise conceded in his deposition that he had no knowledge as to when the astragal in the Elevator was installed or how often it was tested. And Hoover offered no evidence other than Ahern's opinion on the proper size of the astragal.

In any event, the size or condition of the astragal only matters to the extent it impacts the functioning of the descending gate's safety edge. The defendants insist that, regardless of whether the Elevator's astragal was worn down or smaller than it was when first installed, it was not problematic or otherwise dangerous because the safety edge continued to function to code and as designed. The critical question for Hoover's negligence claim is thus whether there is a material dispute of fact concerning the adequacy of an astragal measuring roughly 1.5 inches in depth to perform its intended function. We now turn to that question.

2. The Safety Function of the Astragal

According to Hoover, the Elevator's astragal was defective because it neither provided adequate cushioning to protect people or objects from the impact of the descending gate,

nor triggered the gate's retraction quickly enough to minimize the harm from impact. In other words, relying on Ahern's report and testimony, Hoover asserts that the astragal was so "worn down" and "small" that it no longer could serve either its triggering or its cushioning role. We consider each of those asserted functions in turn.

(a) Triggering Function

According to Ahern, the gate's allegedly worn-down astragal compromised the safety edge's "sensitivity," which, in turn, impacted how the gate retracted once it struck Hoover's head. Ahern described the astragal's role as follows: "[the] rubber has to deform just a little bit before it trips the mechanics that are inside the rubber . . . and that's what causes it to reopen the gate." On this point, the defendants and their experts appear to be in full agreement with Ahern. For example, when asked to explain how the astragal works "operationally," their expert Morrison similarly explained that "once the gate has sequenced to close, as it's coming down, if it makes any contact along that edge . . . it has to start [the gate] reversal process," and "as that rubber boot [or astragal] on the bottom of that [gate] collapses, it opens a switch that causes the [gate] operator to reverse."

Ahern went on to theorize, however, that, because the astragal was worn down, and not as thick as it should have been,

it did not "compress adequately and trip the reopening device." Yet, contrary to that statement, and according to Hoover's own testimony, the gate did, in fact, retract when it hit Hoover's head. Indeed, every expert who testified -- including Ahern -- acknowledged that the Harrison video shows the gate striking the equipment case and then retracting.

Ahern also offered a more refined view of the problem, asserting that the trouble lay not with whether the gate reversed, but whether it "reversed immediately upon light contact with Hoover" to avoid "caus[ing him] injury." That is, according to Ahern, with a too small or worn-down astragal, the gate "can't possibly retract [quickly] enough to prevent injury."

Ahern, however, provides no support for his theory that the gate-reversal was too slow. He cites no code provisions or other requirements addressing the proper level of closing force or the speed of retraction. Nor did he cite any professional experience with similarly worn astragals or similar accidents. Moreover, Ahern conceded that he performed no tests on the Elevator himself and did not know how much the rubber on the gate's edge compressed upon striking an object. Ahern further acknowledged that, without knowing the gate's speed or its weight, he could not calculate its closing force and that, in fact, the gate "may have [closed] at the correct speed."

Put simply, Ahern provided no evidence to support a finding that a thicker astragal would have made a difference in how the gate retracted -- and, hence, no evidence to support Hoover's claim of negligence to the extent it is premised on the failure of the astragal to trigger retraction more quickly.

(b) Cushioning Function

Ahern also suggested that the "too small" astragal was defective because it failed to adequately cushion Hoover from the impact of the gate, resulting in the metal part of the safety edge striking Hoover rather than the softer, more pliant, and force-absorbing rubber. But here, again, Ahern's testimony is only a working theory without any supporting data.

Indeed, the record contains no evidence to support a finding that Hoover was injured by the metal rather than the rubber -- other than Ahern's stated belief that the extent of Hoover's injuries could not possibly have been caused by contact with rubber alone. Nor does Ahern explain how the metal bracket holding the astragal in place could have extended below the rubber to directly strike Hoover. In essence, Ahern's sole evidence that the astragal did not perform its cushioning function adequately is that Hoover was injured. That is, Ahern suggests that there must have been "something wrong" in the functioning of the Elevator's gate on the day of the Incident because a freight elevator's gate is "not designed to injure people" and Hoover was hurt -- a point that is

inadequate under Massachusetts law, which precludes a finding of negligence based simply on the fact of injury. See, e.g., Gardner, 963 F. Supp. 2d at 81-82.

Ahern's assumption also reveals a second flaw in his theory of a defective astragal: he provides no support for his insistence that the astragal is intended to perform a cushioning function in the first place, protecting the object or person from direct contact with the metal gate. In any event, even if such a purpose could be inferred from the astragal's pliant, rubber composition, there is no evidence that such a function could not be achieved with an astragal measuring 1.5 inches.

Moreover, according to the deposition testimony of Stolmeier, the elevator safety inspector for the State of Washington's Department of Labor and Industries, a freight elevator can be code-compliant with only a light curtain to trigger retraction of its gates -- without any additional protection offered by a safety edge or astragal. Per the "code year" applicable to this Elevator, freight elevators are required to have just one reopening device, see ASME Safety Code for Elevators and Escalators, ASME A17.1-2004 § 2.13.3.4.3, <https://perma.cc/Y8BR-4LWU> (captured March 21, 2024); and for those freight elevators that do have a safety edge as a secondary or backup safety device for its light curtain, the only specification provided has nothing to do with the size or condition

of its component parts (including the astragal). Rather, the code requires that freight elevators with safety edges must also have the annunciator sounding five seconds prior to the closing of automatic doors and gates. Id. § 2.13.3.4.1.

According to Hoover's own deposition testimony, the "alarm noise did go off," and "between five to ten seconds" passed between when he first heard the alarm and when the gate hit him. While Massachusetts law makes clear that compliance with industry standards is not conclusive of the standard of care, such code provisions do "provide evidence of negligence" -- or the lack thereof. Berish v. Bornstein, 770 N.E.2d 961, 979 (Mass. 2002); see also, e.g., Getty Petroleum Mktg., Inc. v. Cap. Terminal Co., 391 F.3d 312, 326-27 (1st Cir. 2004) (Lipez, J., concurring) (per curiam) (noting that voluntary industry standards do not "irrefutably establish the standard of care in a negligence case" but instead "constitute 'one more piece of the evidence upon which the jury could decide whether the defendant acted as a reasonably prudent person'" (quoting Bos. & Me. R.R. v. Talbert, 360 F.2d 286, 290 (1st Cir. 1966))).

Importantly, the record contains ample evidence that, when an elevator has a safety edge, as the Elevator did here, the sole purpose of the astragal is to aid the triggering function of the safety edge and that the safety edge here, including its astragal, performed as intended. See supra Section I.A.1. Indeed,

Stolmeier -- whose very job is to assure safe elevator transport of passengers and freight -- explained that the only role of the "collapsible astragal with a wire running through it that goes to a switch" is to "reverse the doors once it has made contact." Stolmeier examined the Elevator after the Incident and reported that, during his inspection, he "used [his] arm underneath the door to compress the astragal and trip the switch," and the gate "reversed" as designed. As a result of his inspection, Stolmeier concluded that the Elevator's "doors,²⁰ floors, lighting, door pressures, door speeds, annunciators, safety switches and door timing" were all "well within code compliance" and that, with no safety issues identified, the Elevator could be returned to service immediately.

Given the unequivocal evidence of the astragal's triggering function and no evidence indicating that the astragal is situated along the bottom edge of the gate to serve a cushioning function, Ahern's "bare ultimate conclusion," Hayes, 8 F.3d at 92, regarding the supposed importance of such a purpose is insufficient to generate a genuine dispute of material fact supporting Hoover's inadequate-cushioning theory of negligence.

²⁰ Stolmeier explained at deposition that he "consider[s] the gate to be a door" and that he was referring to both the gates and doors -- i.e., the Elevator's Peele "door package" -- when concluding that the Elevator's "doors" were in compliance at the time of both the annual and post-accident inspections.

III.

In sum, Hoover offered no evidence, through Ahern or apart from his testimony, that could support a finding that the astragal was too small to perform the triggering function for which it was designed. The record thus permits only the conclusion that the Elevator's safety measures performed as expected. The Elevator had caution signage, an audible warning signal, and a light curtain. The only explanation for Hoover's injury supported by the record is that he and the equipment case he was transporting remained in the elevator doorway for more than twenty seconds, and, as a result, the descending gate's light curtain timed out and the gate resumed its closing cycle while Hoover remained in the doorway.

We recognize that Hoover suffered significant injuries when he was -- in his view -- unexpectedly struck by the Elevator's gate. On the record before us, however, we can only conclude that Hoover was mistaken about how the Elevator's safety features worked. After the light curtain timed out, the alarm signaled that the gate was about to come down -- and it did. Although the astragal may have been worn down to some extent, Ahern's report and testimony do not provide an adequate foundation for a jury to find that Hyatt and Otis negligently failed to maintain the

astragal, resulting in mis-performance that caused Hoover's injury.²¹

Hence, because Hoover failed to raise a genuine issue of material fact as to whether the freight elevator was faulty in any way (including the descending gate's rubber astragal component), we affirm the district court's grant of summary judgment for the defendants.

So ordered.

²¹ Given our conclusion that Hoover has not demonstrated a genuine issue of material fact on the question of whether any part of the Elevator malfunctioned, we need not consider whether he provided sufficient evidence of notice to prove his negligence claim. See, e.g., Bernstein, 294 N.E.2d at 578.