"I confidently expect that..."

"I confidently expect that the next time I bring my bare hand close to a lit match, I will feel warmth in that hand."

—Fine. But is it reasonable for you to expect that you will feel warmth?

"Of course it is. It is perfectly reasonable for me to expect that I will feel warmth the next time I bring my bare hand close to a lit match."

—How so?

"I possess a strong inductive argument with true premises that has as its conclusion that the next time I bring my bare hand close to a lit match, I will feel warmth in that hand."

—What is that argument?

"1. I have countless times in the past brought my bare hand close to a lit match.

"2. Moreover, the conditions under which I have brought my bare hand close to a lit match have varied tremendously.

"3. Each time I have brought my bare hand close to a lit match, I felt warmth in that hand.

"Therefore [I conclude]: 4. Most probably, the next time I bring my bare hand close to a lit match, I will again feel warmth in that hand."

—I accept that yours is a strong inductive argument with true premises. And yet it seems to me that really you have no more reason to expect that the next time you bring your bare hand close to a lit match, you will feel warmth in that hand than you do to expect that you will instead feel yourself chilled to the bone.

"Are you serious?"

—Yes. Your expectation is reasonable only to the extent that you have good reason for thinking that predictions generated by strong inductive arguments with true premises can be relied upon to be borne out by the course of events. I submit that you can have no good reason at all for thinking that.

What we need in order to show that actually we do have good reason for conforming our expectations to the conclusions of strong inductive arguments with true premises is a good argument that has as its conclusion:

Strong inductive arguments with true premises can be relied upon to generate predictions that will be borne out by the course of events.

Here is an argument meant to show that we cannot ever have what we need:

1. No deductive argument can establish a factual matter such as whether strong inductive arguments with true premises can be relied upon to generate predictions that will be borne out by the course of events.

Thus: 2. Our defence of the claim that induction is reliable will have to consist in an inductive argument.

3. Any inductive argument to the desired conclusion ("strong inductive arguments with true premises can be relied upon to generate predictions that will be borne out by the course of events") will employ induction, the very method of generating a conclusion whose reliability is at issue.

4. To argue that a method of generating a conclusion is reliable by using that very method of generating a conclusion is to presuppose in one's argument that that method is reliable.

Thus: 5. Any inductive argument to the conclusion that induction is reliable will presuppose that indeed induction is reliable.

6. To presuppose that induction is reliable in an argument to the conclusion that induction is reliable is to beg the question that induction is reliable.

7. Question-begging reasoning in favour of the reliability of a method of generating a conclusion provides no reason at all to think that that method is reliable.

Therefore:8. There is no good inductive argument that has as its conclusion that strong inductive arguments with true premises can be relied upon to generate predictions that will be borne out by the course of events.

Therefore: 9. We can have no good reason to think that strong inductive arguments with true premises can be relied upon to generate predictions that will be borne out by the course of events.

In defence of premise 3:

"Any inductive argument to the desired conclusion ('strong inductive arguments with true premises can be relied upon to generate predictions that will be borne out by the course of events') will employ induction, the very method of generating a conclusion whose reliability is at issue."

The general form of an inductive argument that strong inductive arguments with true premises can be relied upon to generate predictions that will borne out by the course of events:

1. In the past, predictions generated by strong inductive arguments with true premises have most often been borne out by the course of events.

Therefore: 2. Strong inductive arguments with true premises can now and in the future be relied upon to generate predictions that will be borne out by the course of events.

What is the method of generating a conclusion employed in this argument?
—Induction. It is a strong inductive argument with true premises.

In defence of premise 7:

"Question-begging reasoning in favour of the reliability of a method of generating a conclusion provides no reason at all to think that that method is reliable."

Consider:

1. Ivan is trustworthy.

Therefore: 2. We can rely on Ivan's word. (From 1.)

—OK. But what is your reason for thinking that Ivan is trustworthy?

3. Ivan has assured us that he is trustworthy.

(And as I've already demonstrated, we can rely on Ivan's word.)

Therefore: 4. Ivan is trustworthy. (From 2 and 3.)

This chain of reasoning gives us no reason at all to think we can rely on Ivan's word.

"Can you sum all that up for me?"

        —Sure.

a) You have no reason to expect that the next time you bring your bare hand close to a lit match, you will feel warmth in that hand, for

b) you take your expectation from a prediction generated by an inductive argument, and

c) you have no reason to think that even a strong inductive argument with true premises can be relied upon to generate a prediction that will be borne out by the course of events, for

d) any defence of the idea that inductive arguments can be relied upon to generate predictions that will be borne out by the course of events will be a question-begging defence, and

e) a question-begging defence of an idea is no defence at all.

"Oh my. I feel dizzy and sick. Is there no way out?"

　　　—Well, here are seven responses to the argument I just presented. Maybe one or another of them can guide us out.

Seven responses to the claim that we have no good reason to think that the predictions generated by inductive arguments will be borne out by the course of events, even when those arguments are strong and contain nothing but true premises.

1) The appeal to regularity.

Add to the argument that generates your prediction either: i) a premise describing some supposed physical law that relates bringing a bare hand close to a lit match to feeling warmth in that hand, or: ii) a premise to the effect that nature is regular in its workings.

2) The psychologistic evasion.

Don't worry about the fact that a rationally-unjustifiable habit or custom supervening on a read-only programme is responsible for your expecting like effects to follow from like causes. Reason is not the source of our expectations, and so the discovery that it isn't their source cannot cause us to change our ways.

3) The inductive justification.

Challenge the claim that inductive justifications of induction are question-begging. (Clearly they are not formally circular.)

4) The a priori or transcendental gambit.

The contention that induction is reliable (or that nature is regular) can be successfully defended using a transcendental argument. Such an argument will be deductive and will contain no empirical premises.

5) The rational credibility idea.

There is nothing more to being rational in thinking about the future than conforming one's expectations to the conclusions of strong inductive arguments. As thinking inductively is constitutive of being rational, one cannot sensibly doubt that inductive reasoning is justificatory reasoning.

6) The deductive-critical approach.

Carefully distinguish between the psychological issue how you came to think what you do think about the world and the justificatory issue whether what you think is true. Inductive arguments have no place in the context of justification. Justification is a matter of trying to refute what you think about the world.

7) The pragmatic vindication.

The real issue isn't what rational warrant we have to be confident that predictions got inductively are typically borne out by the course of events; the real issue is what rational warrant we have to prefer to make predictions inductively rather than in other ways. (Don't ask for a justification of induction; ask instead for a justification of your preference for induction over tea-leaf reading, say, or over wishful thinking.) We can defend our preference for conforming our expectations to the conclusions of inductive arguments by noting that if any method of generating predictions is reliable, induction is, while if induction should ever cease to be reliable, no other method of generating predictions will be reliable either.

—P.S. Note that except for 6 and 7, all these responses are completely hopeless, and that 6 and 7 both accept that inductive reasoning is not justificatory reasoning and, more generally, that there is no such thing as rational expectation.