ST. PETERSBURG, Russia—President Vladimir Putin suggested what he called patriotic Russian hackers could have been behind cyberattacks that have soured relations with the U.S. and other countries, adding fresh nuance to his denials that the Russian state was involved.

“If they [hackers] are feeling patriotic they will start contributing, as they believe, to the justified fight against those speaking ill of Russia. Is that possible? In theory, yes. At the
government level, we never engage in this,” he told international media at an investment conference here.

Addressing a question about whether hackers from Russia could meddle in German elections this year, Mr. Putin also suggested that technology could have been used to make it look like Russia was the source of attacks.

U.S. security officials say Russia interfered in the presidential election with cyberattacks, claims Moscow has denied. Investigations into the alleged interference have damaged chances for a quick improvement in relations between Russia and the U.S. under President Donald Trump.

Mr. Putin has consistently maintained that Russia didn’t interfere in the 2016 election or more generally in the internal affairs of other countries. But his suggestion that Russian hackers may have played a freelance role in election hacking—and his clear implication that such efforts were “justified”—appears to mark a change of narrative for the Kremlin.

Kremlin observers say Mr. Putin has often strived to maintain deniability in pursuing foreign-policy aims.

When well-armed military professionals in camouflage took over government buildings in the Black Sea peninsula of Crimea in 2014, Mr. Putin initially suggested the “little green men” were simply wearing store-bought uniforms. Mr. Putin subsequently later acknowledged they were Russian troops.

Similarly, the Kremlin long denied assertions by U.S., Western and Ukrainian officials that Russia backed insurgents in Ukraine with conventional military forces. But in December 2015, Mr. Putin offered a roundabout admission, sayingsaid: “We never said that there weren’t people there dealing with certain tasks, including in the military sphere.”

The accusations of Russian interference in the 2016 election are at the center of a burgeoning scandal in Washington that has embroiled the Trump administration and put paid to hopes of a quick rapprochement between the U.S. and Russia.

Answering a question about what the director of the state news service TASS termed growing “Russophobia” around the world, Mr. Putin said anti-Russian sentiment didn’t stem from Russia’s actions, but from others’ insecurities.

“In my opinion, this is due to the fact that a multipolar world is being established, and this is not to the liking of monopolists,” Mr. Putin said. “This is not the least due to Russia’s struggle for its interests—I want to emphasize, for its legitimate interests.”

Russia has been under U.S. and Western sanctions over Moscow’s annexation of the Black Sea peninsula of Crimea in 2014 and its backing of separatists in eastern Ukraine. The Obama administration late last year expelled what it said were 35 intelligence operatives allegedly serving under diplomatic cover and denied access to two Russian government-owned compounds in the U.S. in retaliation for alleged use of cyberattacks to interfere in the election.

Mr. Putin has consistently denied the Russian state uses hacking to interfere in the politics of other countries.

While the Russian president didn’t delve into specific anti-Russian policies in his comments, he said he saw “certain changes in the situation, and for the better, I hope that this trend will continue.”

In January, Mr. Trump told The Wall Street Journal he would keep sanctions on Russia intact “at least for a period of time.”

Mr. Putin’s remarks came a day after the House Intelligence Committee issued seven subpoenas as part of its investigation into alleged Russian meddling. Also on Wednesday, former Democratic presidential nominee Hillary Clinton, speaking at the
2017 Code Conference in Rancho Palos Verdes, Calif., accused Russian hackers of “colluding” with American political operatives to tilt last year’s election to Mr. Trump.

“It is important that Americans, and particularly people in tech and business understand: Putin wants to bring us down,” Mrs. Clinton said.

The Kremlin hasn’t retaliated over the December expulsion of its personnel from the U.S., but the Russian Embassy in Washington hinted on Wednesday at a possible reaction, posting a quote from Kremlin aide Yury Ushakov: “Nobody has canceled the principle of reciprocity in diplomacy.”

—Yoree Koh and Paul Sonne contributed to this article.

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